Subject Index

Acetonitrile
Proton-transfer Equilibria for N-base–Trimethyl-*N*-oxide Cation Systems in Acetonitrile, 1523
Proton-transfer Mechanism in the Decarboxylation of Ammonium Trichloroacetate in Acetonitrile, 1987
Kinetics of the Substitution of 2,2′-Bipyridine into Aquanickel(II) Ions in Water + Acetonitrile Mixtures, 2439
Acetylene
Hydrogenation of Acetylene over Supported Metal Catalysts. Part 4.—[^{14}C] Tracer Studies of the Reaction Catalysed by Nickel–Silica, 195
Acidity
Acidity of Dealuminated Mordenites Studies by Infrared Spectroscopy, 805
Acidity Functions
Comparison of Activity of Hydroxide and Alkoxide Ions Based on Acidity Functions, 721
Acid–Base Properties
Infrared Study of Acid–Base Properties of Thorium Dioxide, 2219
Infrared Studies of Acid–Base Properties of Vanadium–Titanium Oxide and Oxidation of Alcohols on it, 2343
Acoustic Studies
Packing and Conformational Contributions in Binary Liquid Mixtures. Acoustic Studies of n-Hexadecane with Dimethylpentanes, 2333
Activated Carbon Cloth
Adsorption Interaction of Water with Microporous Adsorbents. Part 1.—Water-vapour Adsorption on Activated Carbon Cloth, 1147
Activation Energies
Temperature Gradients and Activation Energies on Catalytic Wires, 669
Adhesion
Particle Adhesion and Removal in Model Systems. Part 6.—Kinetics of Deposition of Haematite Particles on Steel, 65
Adsorbate Activation
Chemisorption of Oxygen at Ag(110) Surfaces and its Role in Adsorbate Activation, 1779
Adsorbed Macromolecules
Forces between Mica Surfaces Bearing Adsorbed Macromolecules in Liquid Media, 99
Adsorption
Determination of Structure in Oxide Sols and Gels From Neutral Scattering and Nitrogen Adsorption Measurements, 173
Oxychlorination Catalysis, Ethylene Adsorption and Conductivity Studies on Copper Chlorides, 343
Association Effects in Adsorption from Multicomponent Solutions on Solids and Liquid Adsorption Chromatography, 363
Adsorption of Colloidal Hydrous Alumina on Yeast Cells, 561
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Isotopic Study of Hydrogen Adsorption on Magnesium Oxide Powders, 913
Adsorption Interaction of Water with Microporous Adsorbents. Part 1.—Water-vapour Adsorption on Activated Carbon Cloth, 1147
Adsorption Interaction of Water with Microporous Adsorbents. Part 2.—Enthalpy of Immersion and Thermal-desorption Studies, 1157
Adsorption Interaction of Water with Microporous Adsorbents. Part 3.—Dependence of Adsorption–Desorption Hystereses on Extent of Activation, 1165
Interaction between Zeolites and Cluster Compounds. Part 1.—Adsorption of Iron Pentacarbonyl on Zeolites, 1819
Simulation Experiments. The Virial Equation in the Adsorption of Isobutene on Aerosil, 1833
Adsorption of Binary Liquid Mixtures on Heterogeneous Adsorbents, 2085
Adsorption of Some Divalent Cations from Aqueous Solution on Precipitated Silica, 2311
Infrared Study of the Adsorption of $^{16}O_2$, $^{16}O^{18}O$ and $^{18}O_2$ on Cr_2O_3, 2425
Adsorption and Exchange of Polyelectrolytes on Crystal Surfaces, 2745
Adsorption of Bifunctional Nitriles at the Free Water Surface and the Mercury/Water Interface, 2801
Heats and Entropies of Adsorption of N_2 on Grafoil at 79.3 K, 2863
Infrared Study of the Adsorption of Triethylamine at the Rutile/Vapour and Rutile/Heptane Interfaces, 2991
Adsorption from Solution
A Note on the Determination of Adsorption from Solution, 2953
Adsorption–Desorption Hystereses
Adsorption Interaction of Water with Microporous Adsorbents. Part 3.—Dependence of Adsorption–Desorption Hystereses on Extent of Activation, 1165
Aerosil
Simulation Experiments. The Virial Equation in the Adsorption of Isobutene on Aerosil, 1833

Ag
Chemisorption of Oxygen at Ag(110) Surfaces and its Role in Adsorbate Activation, 1779
Albright Equation
Relations between Intradiffusion and Viscosity Coefficients. Tests of the Albright Equation, 1327
Alcohol
Infrared and X-ray Diffraction Investigations of Vanadium–Titanium Oxides for the Oxidation of Alcohol, 2929
Alcohols
Infrared Studies of Acid–Base Properties of Vanadium–Titanium Oxide and Oxidation of Alcohols on it, 2343
Photocatalytic Oxidation of Liquid Alcohols and Binary Alcohol Mixtures by Rutile, 2975
Aldoximes
Mass Spectrometric Study of the Isomerism of Aromatic Aldoximes, 675
Alkali Chlorides
Complex Formation of Alkali Chlorides with Benzo-18-crown-6 Incorporated in Poly(Vinyl Alcohol) in Water + Dioxane and Water + Tetrahydrofuran Mixtures, 2153
Alkali-metal
Heats of Mixing of Poly(styrenesulphonic acid) and its Tetramethylammonium Salt with Alkali-metal Poly(styrenesulphonates) in Dioxan + Water Mixtures, 699
Alkali-metal Halides
The Setchenov Constant of Benzene in Non-aqueous Electrolyte Solutions. Alkali-metal Halides and Aliphatic and Aromatic Salts in Methanol at 298.15 K, 2915
Alkali Nitrates
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
n-Alkanes
Enthalpy and Volume Changes on Mixing Oligo(oxyethylene)s and n-Alkanes, 2695
Alkanols
Solute Interactions in Dilute Aqueous Solutions. Part 5.—Microcalorimetric Study of Polyols and their Mixtures with Alkanols, 2249
Alkenes
Reactions of 2-Methylpropene and other Alkenes on Zinc Oxide, 2899
Alkoxide
Comparison of Activity of Hydroxide and Alkoxide Ions Based on Acidity Functions, 721
Alkyl Iodides
Kinetics and Mechanism of the Quaternization of Poly(4-vinyl pyridine) with Alkyl Iodides, 1951
Alkylation
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 1.—Alkylation of Toluene with Methanol: Consideration of the Effects of Reaction Parameters on Catalyst Deactivation and the Extent of Polysubstitution, 281
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 2.—Alkylation of Toluene with Methanol: Consideration of the Effects of Catalyst Deactivation on the Primary Product Distribution, 297
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Alkylperoxy
Quantitative Measurements of Hydroperoxy and Alkylperoxy Radicals in Gas-phase Oxidation Reactions from Overlapping Electron Paramagnetic Resonance Spectra, 815
Allene
Rhodium-catalysed Hydrogenation of Allene as Revealed by [^{14}C]Propylene and [^{14}C]Carbon Monoxide Tracer Studies, 2195
Al_2O_3
Infrared Spectroscopic Study of Pyridine Adsorption on $MoO_3 \cdot NiO$ Catalysts Supported on Fluorinated γ-Al_2O_3, 2543
Alternating-current Techniques
Alternating-current Techniques in Semiconductor Electrochemistry, 2111
Alumina
Investigation of Precipitated Alumina Structures by Secondary-ion Mass Spectrometry and Electron Paramagnetic Resonance Spectrometry. Part 3.—Structure of an Alumina Coating Precipitated on Rutile Titanium Dioxide, 185
Study of Gas Relative Permeability in a Mesoporous Alumina Pellet, 517
Adsorption of Colloidal Hydrous Alumina on Yeast Cells, 561
Spectroscopic Studies of Butane Isomerization over Platinum Supported on Chlorinated Alumina, 835
Electron Transfer at Alumina Surfaces. Part 7.—Nature of the Radical Species Formed from Perylene on the Surface of an Activated Alumina—Cation or Anion?, 1009
Effects of Preparation Procedure on the Surface Properties of Rhodium Supported on γ-Alumina, 2405
Aluminium
Luminescence of Prophrins and Metalloporphyrins. Part 6.—Luminescence of Aluminium(III) Tetraphenylporphine and its μ-Oxo Dimer, 765
Amines
Kinetic Study of the Reaction between Carbon Dioxide and Primary Amines, 2103

Ammonia
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
Characterization of Zeolite Acidity. A Gas-chromatographic Study using n-Butylamine and Ammonia, 2569
Far-infrared Spectra of the Ammonia and Hydrogen Forms of Zeolites of Types X and Y, 2773
Raman Spectra of Adsorbed Ammonia on Carbon-overlayered Silver Electrodes, 2887
Ammonium Dichromate
A Melt Mechanism for the Thermal Decomposition of Ammonium Dichromate, 2143
Ammonium Trichloroacetate
Proton-transfer Mechanism in the Decarboxylation of Ammonium Trichloroacetate in Acetonitrile, 1987
Anatase→Rutile
Mechanism of the Inhibiting Effect of Phosphate on the Anatase→Rutile Transformation Induced by Thermal and Mechanical Treatment of TiO_2, 2765
Anode Materials
New Anode Materials for Photoelectrolysis, 1199
Anthracene
Determination of the Absolute Quantum Efficiency of the Luminescence of Crystalline Anthracene and of Meso–Dimeso Derivatives using Photoacoustic Spectroscopy, 2853
Anthraquinone-2-sodium Methylsulphonate
Photochemistry of Anthraquinone-2-sodium Methylsulphonate in Aqueous Solutions, 1721
Antimony
X-ray Photoelectron Spectroscopy Study of Uranium and Antimony Mixed Metal-oxide Catalysts, 879
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 1431
Study of Mixed-oxide Catalysts Containing Bismuth, Vanadium and Antimony. Preparation, Phase Composition, Spectroscopic Characterization and Catalytic Oxidation of Propene, 2055
Apparent Molar Volumes
Apparent Molar Volumes of Aqueous Cellobiose Solutions, 845
Aquanickel(II) Ions
Kinetics of the Substitution of 2,2′-Bipyridine into Aquanickel(II) Ions in Water + Acetonitrile Mixtures, 2439
Aqueous Electrolyte
Structure of Aqueous Electrolyte Solutions. Thermodynamic Internal Pressure, 1109
Structure of Aqueous Electrolyte Solutions. Ionic Internal Pressures and Proton Chemical Shifts, 1123
Aqueous Electrolyte Solutions
Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance and Transference Data. Application to Concentrated Solutions of Cadmium Iodide, 1317
Aqueous Solution
Photo-oxidation of Metalloporphyrins in Aqueous Solution, 1335
Aqueous Solutions
Effects of Solvent on Stacking Interactions. A Spectrophotometric Study of Methylene Blue Dimerization in Aqueous Solutions of some Monohydric Alcohols, 1085
Self-association of Phenothiazine Drugs in Aqueous Solutions of High Ionic Strength, 2669
Photoinduced Oxygen Formation and Silver-metal Deposition in Aqueous Solutions of Various Silver Salts by Suspended Titanium Dioxide Powder, 2685
Arrhenius Activation Energy
Interpretation of the Temperature Dependence of the Arrhenius Activation Energy in Solvolytic Reactions, 1483
Asbestos
Cation Site Population in Amphibole Asbestos. A Mössbauer Study, 1451
Association Constants
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Association Effects
Association Effects in Adsorption from Multicomponent Solutions on Solids and Liquid Adsorption Chromatography, 363
Auger
Metal Auger Intensity Ratios in Transition Metals and Their Compounds, 1229
Azo-dyes
Structure of the Cybotactic Region. A Determining Factor in the Spectral Behaviour of Some Azo-dyes in the Presence of Indifferent Electrolytes, 155
Azomethane
The Molecular Component in the Thermal Decomposition of Azomethane, 1891
Barium Sulphate
Kinetics of the Crystallisation of Barium Sulphate. Effects of Additives, Stirring Rate and Barium:Sulphate Ratio on the Rate of Precipitation, 1857
N-Base–Trimethyl-*N*-oxide
Proton-transfer Equilibria for N-base–Trimethyl-*N*-oxide Cation Systems in Acetonitrile, 1523
Benzene
Alkylation Reactions over Ion-exchanged

Benzene (*cont.*)
Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Volumetric and Dielectric Properties of Benzene Solutions of Some Tri-n-alkylammoniumHalides at 298.15 K, 2377
Intracrystalline Diffusion of Benzene in NaX Zeolite Studied by Sorption Kinetics, 2457
The Setchenov Constant of Benzene in Non-aqueous Electrolyte Solutions. Alkali-metal Halides and Aliphatic and Aromatic Salts in Methanol at 298.15 K, 2915
Benzo-18-crown-6
Complex Formation of Alkali Chlorides with Benzo-18-crown-6 Incorporated in Poly(Vinyl Alcohol) in Water + Dioxane and Water + Tetrahydrofuran Mixtures, 2153
Binary Liquid Mixtures
Adsorption of Binary Liquid Mixtures on Heterogeneous Adsorbents, 2085
Packing and Conformational Contributions in Binary Liquid Mixtures. Acoustic Studies of n-Hexadecane with Dimethylpentanes, 2333
2,2′-Bipyridine
Kinetics of the Substitution of 2,2′-Bipyridine into Aquanickel(II) Ions in Water + Acetonitrile Mixtures, 2439
Bismuth
Study of Mixed-oxide Catalysts Containing Bismuth, Vanadium and Antimony. Preparation, Phase Composition, Spectroscopic Characterization and Catalytic Oxidation of Propene, 2055
Bismuth Molybdates
Synergy Effects in the Catalytic Properties of Bismuth Molybdates, 1921
Boundary Conditions
Alternative Boundary Conditions for a Drop Hanging from a Circular Tube, 81
Bromination
Bromination of Fluoroalkanes. Part 5.—Kinetics of Forward and Reverse Reactions in the System $Br_2 + i\text{-}C_3F_7H \rightleftharpoons HBr + i\text{-}C_3F_7Br$, 1471
Bu_4NBr
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Buta-1,2-diene
Electroreduction of Buta-1,2-diene on a Platinum Electrode in Sulphuric Acid Solution, 1027
Buta-1,3-dienes
Selectivity of Muonic Radical Formation in Methyl-substituted Buta-1,3-dienes, 1939
Butan-1-ol
Free Energies of Transfer of Ions from Water to Butan-1-ol, 1001
Infrared Studies of the Effect of Preadsorbed Pyridine on the Oxidation of Butan-2-ol Adsorbed on TiO_2, 2559
Butandiols
Infrared Study of Three Butandiols Adsorbed on Silica Immersed in Carbon Tetrachloride, 263
Butane
Spectroscopic Studies of Butane Isomerization over Platinum Supported on Chlorinated Alumina, 835
Butene
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
t-ButylAlcohol
Kinetics of the Solvolysis of the *trans*-Dichlorotetrapyridinecobalt(III) Ion in Water + t-ButylAlcohol Mixtures, 2367
n-Butylamine
Characterization of Zeolite Acidity by n-Butylamine Titration. A Comparative Study using Hammett Indicators and Calorimetry, 147
***β*-Butyrolactone (4-Methyloxetan-2-one)**
Thermal Unimolecular Decomposition of *β*-Butyrolactone (4-Methyloxetan-2-one), 1659
Cadmium Iodide
Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance and Transference Data. Application to Concentrated Solutions of Cadmium Iodide, 1317
Calcite
Crystallisation Kinetics of Calcite from Calcium Bicarbonate Solutions between 278.15 and 303.15 K, 1617
Calcium Bicarbonate
Crystallisation Kinetics of Calcite from Calcium Bicarbonate Solutions between 278.15 and 303.15 K, 1617
Calcium Nitrate
Measurements of Self-diffusion Coefficients of the Nitrate Ion in Aqueous Solutions of Potassium Nitrate and Calcium Nitrate, 1765
Calcium Oxide
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Calcium Sulphate Dihydrate
Mechanism of Dehydration of Calcium Sulphate Dihydrate. Application of the Helium Pyknometric Technique, 2071

Calorimetry
Characterization of Zeolite Acidity by n-Butylamine Titration. A Comparative Study using Hammett Indicators and Calorimetry, 147
Capillary Phenomena
Capillary Phenomena. Part 22.—Stability Regarding Solids Displaced at Interfaces, Pendent-drop Formation and Drainage Models Subject to Various Mechanical Conditions, 2529
Carbocations
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Carbon
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
Carbon Cloth
Development of Pore Structure in Carbon Cloth by HNO_3 Activation, 1173
Carbon Dioxide
Thermal Conductivity of Carbon Dioxide in the Temperature Range 300–348 K and Pressures up to 25 MPa, 733
Kinetic Study of the Reaction between Carbon Dioxide and Primary Amines, 2103
Carbon Dissolution
Resistivity and Kinetic Measurements of Carbon Dissolution in Alpha and Gamma Iron, 1
Carbon Growth
Kinetics of Monticular Carbon Growth on Polycrystalline Iron, 15
Carbon Monoxide
Temperature-programmed Desorption Study of Carbon Monoxide Adsorbed on Magnesium Oxide, 1373
Heat of Adsorption of Carbon Monoxide on Zinc Oxide Pretreated by Various Methods, 1995
Carbon Tetrachloride
Infrared Study of Three Butandiols Adsorbed on Silica Immersed in Carbon Tetrachloride, 263
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Carrageenan
Role of Cations in the Conformation of Iota and Kappa Carrageenan, 2475
Equilibrium and Dynamic Studies of the Disorder–Order Transition of Kappa Carrageenan, 2489
Dynamics of Cation-induced Conformational Ordering in Solutions of Segmented Iota Carrageenan, 2501
Catalase
Mechanism of Catalase Action, 2125
Catalyst
Generation of Heat in a Single Catalyst Pellet Placed in an Electromagnetic Field for Endothermic Reforming of Hydrocarbons, 1073
Catalysts
X-ray Photoelectron Spectroscopy Study of Uranium and Antimony Mixed Metal-oxide Catalysts, 879
Mössbauer Study of Iron Phthalocyanines as Catalysts of Cumene Oxidation, 1091
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 1431
Studies on Nickel Oxide Mixed Catalysts. Part 12.—Characterization of NiO/Al_2O_3–SiO_2 Catalysts, 2013
Study of Mixed-oxide Catalysts Containing Bismuth, Vanadium and Antimony. Preparation, Phase Composition, Spectroscopic Characterization and Catalytic Oxidation of Propene, 2055
Catalytic Activity
Chromium Ions within Zeolites. Part 3.—The Influence of the Valence State of Chromium on the Catalytic Activity of Cr Zeolites in Ethylene Polymerization, 1591
Catalytic Properties
Synergy Effects in the Catalytic Properties of Bismuth Molybdates, 1921
Catalytic Wires
Temperature Gradients and Activation Energies on Catalytic Wires, 669
Cation-radical Salts
Electron Spin Resonance Investigation of Cation-radical Salts of *N,N,N',N'*-Tetramethyl-*p*-phenylenediaminium (TMPD) Hexafluorophosphate, Hexafluorarsenate and Hexafluoro-antimonate, 2077
Cation Site Population
Cation Site Population in Amphibole Asbestos. A Mössbauer Study, 1451
CdO
Photoelectrochemical Studies with n-Type CdO, 2875
Cellobiose
Apparent Molar Volumes of Aqueous Cellobiose Solutions, 845
Cerium
Kinetics and Mechanism of the Cerium(IV)/Cerium (III) Redox Reaction on a Platinum Electrode, 1741
Characterization
Studies on Nickel Oxide Mixed Catalysts. Part 12.—Characterization of NiO/Al_2O_3–SiO_2 Catalysts, 2013

Chemical Relaxation
How Much May the Equilibrium be Shifted in a Chemical Relaxation Experiment? Part 2.—Two-step Systems, 209
Chemical Systems
Reactions for Chemical Systems far from Equilibrium, 75
Chemiluminescent Reactions
Spectroscopy and Mechanism of Chemiluminescent Reactions between Group V Hydrides and Ozone, 527
Chemisorption
Various Equations for the Kinetics of Chemisorption Derived from a Common Model, 119
Chemisorption of Oxygen at Ag(110) Surfaces and its Role in Adsorbate Activation, 1779
Chlorine Oxyanions in Water
Size, Shape and Charge Effects in the Partial Molal Volume, Compressibility in Electrostriction Behaviour of Sulphur and Chlorine Oxyanions in Water, 1357
Chromatography
Association Effects in Adsorption from Multicomponent Solutions on Solids and Liquid Adsorption Chromatography, 363
Chromium Ions
Chromium Ions within Zeolites. Part 1.—Infrared, Electron Spin Resonance and Temperature-programmed Reduction Studies of the Valence States of Chromium Ions, 1573
Chromium Ions within Zeolites. Part 2.—A Quantum-chemical Study of the Properties of Chromium Ions in Faujasites, 1585
Chromium Ions within Zeolites. Part 3.—The Influence of the Valence State of Chromium on the Catalytic Activity of Cr Zeolites in Ethylene Polymerization, 1591
Circular Tube
Alternative Boundary Conditions for a Drop Hanging from a Circular Tube, 81
Cluster Compounds
Interaction between Zeolites and Cluster Compounds. Part 1.—Adsorption of Iron Pentacarbonyl on Zeolites, 1819
Co^{2+}
Extended X-ray Absorption Fine Structure Investigation of Local Symmetry Changes in Co^{2+} and Ni^{2+}-exchanged Zirconium Phosphates, 1039
Characterization of the Surfaces of MgO–ZnO Solid Solutions by CO and H_2 Adsorption at Room Temperature, 1843
Cobalamins
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Coenzyme B_{12}
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Coke Formation
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Colloid Stability
Colloid Stability of Casein-coated Polystyrene Particles, 2937
Colloidal Catalysis
Colloidal Catalysis. Transport *versus* Surface Control, 1649
Complex Formation
Complex Formation of Alkali Chlorides with Benzo-18-crown-6 Incorporated in Poly(Vinyl Alcohol) in Water + Dioxane and Water + Tetrahydrofuran Mixtures, 2153
Complexation Reaction
Conductance Stopped-flow Study of the Complexation Reaction of Poly(4-vinvylpyridine) with Nickel(II) Ions, 1639
Compressibility
Size, Shape and Charge Effects in the Partial Molal Volume, Compressibility in Electrostriction Behaviour of Sulphur and Chlorine Oxyanions in Water, 1357
CoNaY
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Conductance
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Conductance Stopped-flow Study
Conductance Stopped-flow Study of the Complexation Reaction of Poly(4-vinvylpyridine) with Nickel(II) Ions, 1639
Conductances
Separation of Limiting Equivalent Conductances into Ionic Contributions in Non-aqueous Solutions by Indirect Methods, 571
Conduction
Activation of Electronic Conduction in Molecular Solids by Adsorbed Water, 705
Conductivity
Oxychlorination Catalysis, Ethylene Adsorption and Conductivity Studies on Copper Chlorides, 343
Thermal Conductivity of Carbon Dioxide in the Temperature Range 300–348 K and Pressures up to 25 MPa, 733
Contact Angles
Liquid/Liquid/Solid Contact Angles Measured by Interference Microscopy, 2723

Copper(II)
Effect of Copper(II) Ions on the γ-Radiolysis of Uracil, 2613
Copper Chlorides
Oxychlorination Catalysis, Ethylene Adsorption and Conductivity Studies on Copper Chlorides, 343
Counterions
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethoxysulphate Surfactants in Concentrated Micellar Solutions. Part 1.—Effects of Acid and Surfactant Concentrations and of the Nature and Concentration of Counterions, 953
Cr_2O_3
Infrared Study of the Adsorption of $^{16}O_2$, $^{16}O^{18}O$ and $^{18}O_2$ on Cr_2O_3, 2425
Crystal Hydrates
Reorganization of Surface Layers of Crystal Hydrates in Dehydration/Rehydration Experiments, 1599
Crystal Surfaces
Adsorption and Exchange of Polyelectrolytes on Crystal Surfaces, 2745
Crystallisation
Kinetics of the Crystallisation of Barium Sulphate. Effects of Additives, Stirring Rate and Barium:Sulphate Ratio on the Rate of Precipitation, 1857
Crystallisation Kinetics
Crystallisation Kinetics of Calcite from Calcium Bicarbonate Solutions between 278.15 and 303.15 K, 1617
$CuAl_2O_4$–$CdAl_2O_4$ Spinel Solid Solutions
Synthesis and Structural Characterization of $CuAl_2O_4$–$CdAl_2O_4$ Spinel Solid Solutions, 1191
Cumene
Mössbauer Study of Iron Phthalocyanines as Catalysts of Cumene Oxidation, 1091
9-Cyanoanthracene
Photoreactivity of 9-Cyanoanthracene Thermally Generated inside 9-Cyanoanthracene Photodimer Single Crystals, 2133
Cyanomethyl Radical
Pyrolysis of Propionitrile and the Resonance Stabilisation Energy of the Cyanomethyl Radical, 2755
Cybotactic Region
Structure of the Cybotactic Region. A Determining Factor in the Spectral Behaviour of Some Azo-dyes in the Presence of Indifferent Electrolytes, 155
Cyclopropane
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Decarboxylation
Proton-transfer Mechanism in the Decarboxylation of Ammonium Trichloroacetate in Acetonitrile, 1987
Decomposition Intermediates
Relationship between Stabilization and Photocurrent at n-Type Semiconductor Electrodes on the Basis of a Model Including Surface Recombination through Decomposition Intermediates, 1391
Dehydration
Mechanism of Dehydration of Calcium Sulphate Dihydrate. Application of the Helium Pyknometric Technique, 2071
Dehydration/Rehydration
Reorganization of Surface Layers of Crystal Hydrates in Dehydration/Rehydration Experiments, 1599
Deuterium
Solution of Hydrogen and Deuterium in Palladium Phosphide, Pd_4P, 1605
Diazomethane
Photochemical Reactions of Ketene and Diazomethane with 2,3-Dimethyl-2,3-epoxybutane, 2179
Diborane
Purification of Gases in H-Mordenite Modified with Silane and Diborane, 2821
Encapsulation of Gases in H-Mordenite Modified with Silane and Diborane, 2835
2,6-Dichloro-4-nitrophenol–Amine
^{35}Cl Nuclear Quadrupole Resonance and Infrared Spectroscopic Studies of 2,6-Dichloro-4-nitrophenol–Amine Hydrogen-bonded Adducts, 2005
Dielectric
Dielectric and Far-infrared Investigation of Cation Movements in X-type Zeolites. Study of their Correlations, 779
Dielectric Properties
Dielectric Properties and Structure of *N*-Methylpropionamide + Methanol Mixtures, 245
Volumetric and Dielectric Properties of Benzene Solutions of Some Tri-n-alkylammoniumHalides at 298.15 K, 2377
Differential Thermal Analysis
Effect of Pressure on the Phase Transition of the $(C_4H_3)_3PCH[_2]^+$ $(TCNQ)_2^-$-Anion Radical Salt as Studied by Differential Thermal Analysis under Pressure, 1757
Diffusion Coefficient
Determination of the Intracrystalline Diffusion Coefficient of Methane in A Zeolites by Means of Neutron Spin-echo Experiments, 1911
Diffusion
Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance and Transference Data. Application to Concentrated Solutions of Cadmium Iodide, 1317
Diffusion Control
Electrochemical Deposition of Hemispherical Nuclei under Diffusion Control. Some Theoretical Considerations, 467

Diffusion Data
Fourier-transform Nuclear Magnetic Resonance Measurements of Self-diffusion in the 1,1,2,2-Tetrabromoethane + n-Akylbenzene System. Comment on Approximate Hydrodynamic Models for the Interpretation of Diffusion Data, 1351
Dilute Aqueous Solutions
Solute Interactions in Dilute Aqueous Solutions. Part 5.—Microcalorimetric Study of Polyols and their Mixtures with Alkanols, 2249
2,3-Dimethyl-2,3-epoxybutane
Photochemical Reactions of Ketene and Diazomethane with 2,3-Dimethyl-2,3-epoxybutane, 2179
2,3-Dimethyl-2,3-epoxypentane
Kinetics of the Gas-phase Thermal Decomposition of 2,3-Dimethyl-2,3-epoxypentane, 2185
Dimethylbutenes
Reactions of Dimethylbutenes on Nickel-exchanged and Zinc-exchanged 13X-type Zeolites, 453
Dimethylformamide
Molar Volumes and Mobilities of Some Divalent Transition Metal-metal in Dimethylformamide, 2319
3,3-Dimethyloxetan
Chemical Activation Study of the Reactions of Methylene with Oxetan and 3,3-Dimethyloxetan, 1237
Dimethylpentanes
Packing and Conformational Contributions in Binary Liquid Mixtures. Acoustic Studies of n-Hexadecane with Dimethylpentanes, 2333
Washburn Numbers. Part 5.—Relative Solvent Transport Numbers for Ion Constituents in the Dioxan + Water and Dimethylsulphoxide + Water Systems, 2289
Diols
Dynamic Studies of the Interaction between Diols and Water by Ultrasonic Methods. Part 2.—Pentane-1,5-diol and Hexane-1,6-diol Solutions, 2651
Dioxan
Heats of Mixing of Poly(styrenesulphonic acid) and its Tetramethylammonium Salt with Alkali-metal Poly(styrenesulphonates) in Dioxan + Water Mixtures, 699
Washburn Numbers. Part 5.—Relative Solvent Transport Numbers for Ion Constituents in the Dioxan + Water and Dimethylsulphoxide + Water Systems, 2289
1,1-Diphenylethylene
Pulse Radiolysis and Product Analysis of 1,1-Diphenylethylene and Related Compounds in Methanol, 2389
Dismutase
Mechanism of the Reaction of Bovine Copper–Zinc Superoxide Dismutase. An Electron Spin Resonance Study, 2983
Disorder–Order Transition
Equilibrium and Dynamic Studies of the Disorder–Order Transition of Kappa Carrageenan, 2489
Dispersions
Magnetic Relaxation in Glass-bead/Water Dispersions, 1901
2,5-Distyrylpyrazine
Luminescence and Photoreactivity of 2,5-Distyrylpyrazine Crystals, 1183
Dithiazol-2-yl
Rotational Correlation Times and Radii of Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 439
Electron Spin Resonance Investigation of Sulphur-33 and Nitrogen-15 Substituted Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 925
Dithiazolidin-2-yl
Rotational Correlation Times and Radii of Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 439
Electron Spin Resonance Investigation of Sulphur-33 and Nitrogen-15 Substituted Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 925
Dodecyldiethoxysulphate
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethoxysulphate Surfactants in Concentrated Micellar Solutions. Part 1.—Effects of Acid and Surfactant Concentrations and of the Nature and Concentration of Counterions, 953
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of Added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Dodecylsulphate
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethoxysulphate Surfactants in Concentrated Micellar Solutions. Part 1.—Effects of Acid and Surfactant Concentrations and of the Nature and Concentration of Counterions, 953
Kinetics of the Acid-catalysed Hydrc!ysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of Added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Domain Boundaries
A High-resolution Electron Microscopy Examination of Domain Boundaries in Crystals of Synthetic Goethite, 2679
Drop
Alternative Boundary Conditions for a Drop Hanging from a Circular Tube, 81
Elasticity
Test of the Librational Entropy Mechanisms of Elasticity of the Polypentapeptide of Elastin. Effect of Introducing a Methyl Group at Residue 5, 853
Elastin
Test of the Librational Entropy Mechanisms of Elasticity of the Polypentapeptide of Elastin.

Elastin (*cont.*)
Effect of Introducing a Methyl Group at Residue 5, 853
Electrochemical Deposition
Electrochemical Deposition of Hemispherical Nuclei under Diffusion Control. Some Theoretical Considerations, 467
Electrochemistry
Electrochemistry of Ruthenates. Part 1.—Oxygen Reduction on Pyrochlore Ruthenates, 893
Electrochemistry and Photoelectrochemistry of Iron(III) Oxide, 2027
Electrodes
Characterization of Raney-nickel Fuel-cell Electrodes by Impedance Measurements, 823
Electrolysis
Use of Thallium(I) Probe for Identifying Sites of Mobile Cations in Glass during Electrolysis, 661
Electrolyte Solutions
The Setchenov Constant of Benzene in Non-aqueous Electrolyte Solutions. Alkali-metal Halides and Aliphatic and Aromatic Salts in Methanol at 298.15 K, 2915
Electrolytes
Structure of the Cybotactic Region. A Determining Factor in the Spectral Behaviour of Some Azo-dyes in the Presence of Indifferent Electrolytes, 155
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of Added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Free Energies of Transfer of 1:1 Electrolytes from Water to Nitrobenzene. Partition of Ions in the Water + Nitrobenzene System, 2713
Electrolytic Conductivity
Electrolytic Conductivity of Branched Polyelectrolytes, 1403
Electrolytic Oxidation
Kinetic Study of the Electrolytic Oxidation of Manganese(II) to Manganese(III) in Sulphuric Acid, 417
Electromagnetic Field
Generation of Heat in a Single Catalyst Pellet Placed in an Electromagnetic Field for Endothermic Reforming of Hydrocarbons, 1073
Electron Addition
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Electron-donor–Acceptor Complexes
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Electron Donor–Acceptor Interactions
Electron Donor–Acceptor Interactions in the Quenching of Aromatic Hydrocarbon Fluorescence. The Effects of Temperature and Solvent Permittivity, 221
Electron Microscopy
A High-resolution Electron Microscopy Examination of Domain Boundaries in Crystals of Synthetic Goethite, 2679
Electron Paramagnetic Resonance
Investigation of Precipitated Alumina Structures by Secondary-ion Mass Spectrometry and Electron Paramagnetic Resonance Spectrometry. Part 3.—Structure of an Alumina Coating Precipitated on Rutile Titanium Dioxide, 185
Quantitative Measurements of Hydroperoxy and Alkylperoxy Radicals in Gas-phase Oxidation Reactions from Overlapping Electron Paramagnetic Resonance Spectra, 815
Electron Spin Resonance
Electron Spin Resonance Spectra of Tetrafluoroethylene Radical Cation, 93
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Electron Spin Resonance Investigation of Sulphur-33 and Nitrogen-15 Substituted Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 925
Vanadyls from Oil Shale Rotational Motion Studied by Electron Spin Resonance Spectroscopy, 1733
Radical Cations of Halogenobenzenes. An Electron Spin Resonance Study, 1931
Electron Spin Resonance Investigation of Cation-radical Salts of *N,N,N',N'*-Tetramethyl-*p*-phenylenediaminium (TMPD) Hexafluorophosphate, Hexafluorarsenate and Hexafluoro-antimonate, 2077
Electron Spin Resonance Spectra
Structure of the Tetrafluoroethylene Radical Anion and Interpretations of its Electron Spin Resonance Spectra, 1565
Electron Spin Resonance Studies
X-ray Photoelectron Spectroscopy, X-ray Auger Electron Spectroscopy and Electron Spin Resonance Studies of the Reduction of Some Solid Metal 12-Molybdophosphates, 2467
Electron Spin Resonance Study
Mechanism of the Reaction of Bovine Copper–Zinc Superoxide Dismutase. An Electron Spin Resonance Study, 2983
Electron Transfer
Photoinduced Electron Transfer in the Paraquat–Thiourea Molecular Complex, 55
Heterogeneous Catalysis in Solution. Part 22.—Oxidation–Reduction Reactions Catalysed by Electron Transfer through the Solid: Theory for Partial and Complete Mass-transport Control, 481
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651

Electron Transfer (*cont.*)
Calculation of the Energy of Repolarization for a 'Soft-charge' Electron-transfer Transition, 797
Electron Transfer at Alumina Surfaces. Part 7.—Nature of the Radical Species Formed from Perylene on the Surface of an Activated Alumina—Cation or Anion?, 1009
Electronic Quenching
Electronic Quenching of Pyrene $^1B_{1u}$ by Olefins in the Vapour Phase, 235
Electronic Spectroscopy
Matrix-isolation Studies by Electronic Spectroscopy of Group IIIA Metal–Water Photochemistry, 1533
Electroreduction
Electroreduction of Buta-1,2-diene on a Platinum Electrode in Sulphuric Acid Solution, 1027
Electrostriction
Size, Shape and Charge Effects in the Partial Molal Volume, Compressibility in Electrostriction Behaviour of Sulphur and Chlorine Oxyanions in Water, 1357
Encapsulation of Gases
Encapsulation of Gases in H-Mordenite Modified with Silane and Diborane, 2835
Endothermic Reforming
Generation of Heat in a Single Catalyst Pellet Placed in an Electromagnetic Field for Endothermic Reforming of Hydrocarbons, 1073
Enthalpies
Enthalpies and Heat Capacities of Transfer of Some Sugars from Water to Aqueous Urea, 1303
Enthalpies of Solution
Enthalpies of Solution of Some Uni-univalent Electrolytes in Hexamethylphosphotriamide at 298.15 K, 2211
Enthalpies of Transfer
Method for the Direct Determination of Enthalpies of Transfer between Immiscible Solvents using an Isoperibol Flow Microcalorimeter, 1311
Enthalpy
Enthalpy and Volume Changes on Mixing Oligo(oxyethylene)s and n-Alkanes, 2695
Enthalpy Coefficients
Enthalpy Coefficients of Pairwise Interactions between Polar Molecules and Long-chainAliphatic Ions in Water at 298,15 K, 2517
Enthalpy of Immersion
Adsorption Interaction of Water with Microporous Adsorbents. Part 2.—Enthalpy of Immersion and Thermal-desorption Studies, 1157
Enthalpy of Solution
Enthalpy of Solution of NaI in Glycerol + Aliphatic Alcohol Mixtures at 313.15 K, 2879
Enthalpy of Transfer
Relationship between the Enthalpy of Transfer of a Solute and the Thermodynamic Mixing Functions of Mixed Solvents, 1061
Entropy
Test of the Librational Entropy Mechanisms of Elasticity of the Polypentapeptide of Elastin. Effect of Introducing a Methyl Group at Residue 5, 853
Equilibrium
How Much May the Equilibrium be Shifted in a Chemical Relaxation Experiment? Part 2.—Two-step Systems, 209
Equilibrium Constants
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Ethane
Rates of Hydroxy Radical Reactions with Methane, Ethane and Propane over the Temperature Range 403–696 K, 689
Thermodynamic Study of Liquid Mixtures of Ethane and Ethene, 2657
Ethanol
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Ethene
Thermodynamic Study of Liquid Mixtures of Ethane and Ethene, 2657
Ethylene
Oxychlorination Catalysis, Ethylene Adsorption and Conductivity Studies on Copper Chlorides, 343
Ethylene Polymerization
Chromium Ions within Zeolites. Part 3.—The Influence of the Valence State of Chromium on the Catalytic Activity of Cr Zeolites in Ethylene Polymerization, 1591
Ethylenediaminetetra-acetic acid
Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Ethylenediaminetetra-acetic acid (EDTA) in Aqueous Solution, 543
Ethylperoxy
Reactions of Oxygenated Radicals in the Gas Phase. Self-reactions of Ethylperoxy Radicals, 505
Far-infrared
Dielectric and Far-infrared Investigation of Cation Movements in X-type Zeolites. Study of their Correlations, 779
Far-infrared Spectra
Far-infrared Spectra of the Ammonia and Hydrogen Forms of Zeolites of Types X and Y, 2773

Faujasites
Chromium Ions within Zeolites. Part 2.—A Quantum-chemical Study of the Properties of Chromium Ions in Faujasites, 1585
Flash-photolysis Study
Triplet-mediated Photoreduction of Viologens by Aromatic Hydrocarbons. A Laser Flash-photolysis Study, 1135
Fluorescence Quenching
Time-resolved Studies of Fluorescence Quenching in a Water-in-oil Microemulsion, 2161
Fluoroalkanes
Bromination of Fluoroalkanes. Part 5.—Kinetics of Forward and Reverse Reactions in the System $Br_2 + i\text{-}C_3F_7H \rightleftharpoons HBr + i\text{-}C_3F_7Br$, 1471
Formaldehyde
Reaction of Methyl Radicals with Formaldehyde in the Range $500 \leqslant T/K \leqslant 603$, 749
Free Energies of Transfer
Free Energies of Transfer of Ions from Water to Butan-1-ol, 1001
Free Energies of Transfer of 1:1 Electrolytes from Water to Nitrobenzene. Partition of Ions in the Water + Nitrobenzene System, 2713
Fuel-cell
Characterization of Raney-nickel Fuel-cell Electrodes by Impedance Measurements, 823
Gas Adsorption
Linear-driving-force Model for Non-isothermal Gas Adsorption Kinetics, 785
Gas-chromatographic Study
Characterization of Zeolite Acidity. A Gas-chromatographic Study using n-Butylamine and Ammonia, 2569
Gas Phase
Use of Spin Traps in the Study of Silyl Radicals in the Gas Phase, 2705
Gas-phase Decomposition
Kinetics of the Thermal Gas-phase Decomposition of Methoxycyclopropane, 1413
Gaseous Univalent Ions
Calculation of the Thermodynamics of Solvation of Gaseous Univalent Ions in Water from 273 to 573 K, 2781
Gases
Thermal Conductivity of Polyatomic Gases at Low Density, 163
Gels
Determination of Structure in Oxide Sols and Gels From Neutral Scattering and Nitrogen Adsorption Measurements, 173
Glass
Use of Thallium(I) Probe for Identifying Sites of Mobile Cations in Glass during Electrolysis, 661
Glass-bead
Magnetic Relaxation in Glass-bead/Water Dispersions, 1901
Gold
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
Grafoil
Heats and Entropies of Adsorption of N_2 on Grafoil at 79.3 K, 2863
Graphites
Microstructure and Stability of Iron Chloride Graphites, 1793
Group IIIA Metal–Water Photochemistry
Matrix-isolation Studies by Electronic Spectroscopy of Group IIIA Metal–Water Photochemistry, 1533
Group V Hydrides
Spectroscopy and Mechanism of Chemiluminescent Reactions between Group V Hydrides and Ozone, 527
H_2 Adsorption
Characterization of the Surfaces of MgO–ZnO Solid Solutions by CO and H_2 Adsorption at Room Temperature, 1843
Haematite
Particle Adhesion and Removal in Model Systems. Part 6.—Kinetics of Deposition of Haematite Particles on Steel, 65
Radiation Chemistry of Colloidal Haematite and Magnetite in Water. Reductive Dissolution by $(CH_3)_2\dot{C}OH$ Radicals and $Fe^{II}EDTA$, 2961
Halogenobenzenes
Radical Cations of Halogenobenzenes. An Electron Spin Resonance Study, 1931
Hammett Indicators
Characterization of Zeolite Acidity by n-Butylamine Titration. A Comparative Study using Hammett Indicators and Calorimetry, 147
Heat Capacities
Enthalpies and Heat Capacities of Transfer of Some Sugars from Water to Aqueous Urea, 1303
Heat of Adsorption
Heat of Adsorption of Carbon Monoxide on Zinc Oxide Pretreated by Various Methods, 1995
Heats of Mixing
Heats of Mixing of Poly(styrenesulphonic acid) and its Tetramethylammonium Salt with Alkali-metal Poly(styrenesulphonates) in Dioxan + Water Mixtures, 699
Helium Pyknometric Technique
Mechanism of Dehydration of Calcium Sulphate Dihydrate. Application of the Helium Pyknometric Technique, 2071
Heterogeneous Adsorbents
Adsorption of Binary Liquid Mixtures on Heterogeneous Adsorbents, 2085
Heterogeneous Catalysis
Heterogeneous Catalysis in Solution. Part 22.—Oxidation–Reduction Reactions Catalysed by Electron Transfer through the Solid: Theory for Partial and Complete Mass-transport Control, 481
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III) + Iodide Reaction at a Rotating-platinum-disc Catalyst, 491

Hexacyanoferrate
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III) + Iodide Reaction at a Rotating-platinum-disc Catalyst, 491
n-Hexadecane
Packing and Conformational Contributions in Binary Liquid Mixtures. Acoustic Studies of n-Hexadecane with Dimethylpentanes, 2333
Hexamethylbenzene
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Hexamethylphosphoric Triamide
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Separation of Viscosity *B* Coefficients into Ionic Contributions. Part 2.—Tetrabutylammonium Tetrabutylborate and Tetraphenylphosphonium Tetraphenylborate in Hexamethylphosphoric Triamide, 2631
Enthalpies of Solution of Some Uni-univalent Electrolytes in Hexamethylphosphotriamide at 298.15 K, 2211
Hexane-1,6-diol
Dynamic Studies of the Interaction between Diols and Water by Ultrasonic Methods. Part 2.—Pentane-1,5-diol and Hexane-1,6-diol Solutions, 2651
Histidine
Proton Magnetic Relaxation Mechanisms and Solution Dynamics of L-**Histidine**, 2955
HNO_3
Development of Pore Structure in Carbon Cloth by HNO_3 Activation, 1173
Hydrocarbons
Generation of Heat in a Single Catalyst Pellet Placed in an Electromagnetic Field for Endothermic Reforming of Hydrocarbons, 1073
Triplet-mediated Photoreduction of Viologens by Aromatic Hydrocarbons. A Laser Flash-photolysis Study, 1135
Hydrodynamic Models
Fourier-transform Nuclear Magnetic Resonance Measurements of Self-diffusion in the 1,1,2,2-Tetrabromoethane + n-Akylbenzene System. Comment on Approximate Hydrodynamic Models for the Interpretation of Diffusion Data, 1351
Hydrogen
Studies of the Surface of Titanium Dioxide. Part 5.—Thermal Desorption of Hydrogen, 137
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651
Isotopic Study of Hydrogen Adsorption on Magnesium Oxide Powders, 913
Hydrogen Adsorbed on Platinum and Nickel. Comparison with New Incoherent Inelastic Neutron Scattering Data on some Metal Hydridocarbonyls, 1281
Hydrogen Spillover onto the Rare-earth Intermetallic Compound $SmMg_3$, 1461
Solution of Hydrogen and Deuterium in Palladium Phosphide, Pd_8P, 1605
O_2^- Formation on Magnesium Oxide Powders containing Preadsorbed Hydrogen, 2277
Stoichiometry and Rate of Reaction of Hydrogen Atoms with Oxygen, 2597
Recoil Tritium Reactions with Molecular Hydrogen. Part 3.—Isotope Effects, 2735
Hydrogenation
Particle-size Distribution of Nickel Dispersed on Silica and its Effects on Hydrogenation of Propionaldehyde, 127
Hydrogenation of Acetylene over Supported Metal Catalysts. Part 4.—[^{14}C] Tracer Studies of the Reaction Catalysed by Nickel–Silica, 195
Rhodium-catalysed Hydrogenation of Allene as Revealed by [^{14}C]Propylene and [^{14}C]Carbon Monoxide Tracer Studies, 2195
Hydrolysis
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethoxysulphate Surfactants in Concentrated Micellar Solutions. Part 1.—Effects of Acid and Surfactant Concentrations and of the Nature and Concentration of Counterions, 953
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of Added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Hydroperoxy
Quantitative Measurements of Hydroperoxy and Alkylperoxy Radicals in Gas-phase Oxidation Reactions from Overlapping Electron Paramagnetic Resonance Spectra, 815
Hydroxide
Comparison of Activity of Hydroxide and Alkoxide Ions Based on Acidity Functions, 721
Hydroxy Radical
Rates of Hydroxy Radical Reactions with Methane, Ethane and Propane over the Temperature Range 403–696 K, 689
Hydroxy Radicals
Reaction of Radiolytically Generated Hydroxy Radicals with Maleic Hydrazide, 1503
Hyperfiltration
Material Transport in Hyperfiltration, 2359

Hysteresis
Hysteresis in Solid-state Reactions, 2043
Immiscible Solvents
Method for the Direct Determination of Enthalpies of Transfer between Immiscible Solvents using an Isoperibol Flow Microcalorimeter, 1311
Impedance
Characterization of Raney-nickel Fuel-cell Electrodes by Impedance Measurements, 823
Infrared
Infrared Study of Three Butandiols Adsorbed on Silica Immersed in Carbon Tetrachloride, 263
Infrared and X-ray Diffraction Investigations of Vanadium–Titanium Oxides for the Oxidation of Alcohol, 2929
Chromium Ions within Zeolites. Part 1.—Infrared, Electron Spin Resonance and Temperature-programmed Reduction Studies of the Valence States of Chromium Ions, 1573
Infrared Spectroscopic
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Infrared Spectroscopic Studies
^{35}Cl Nuclear Quadrupole Resonance and Infrared Spectroscopic Studies of 2,6-Dichloro-4-nitrophenol–Amine Hydrogen-bonded Adducts, 2005
Infrared Spectroscopic Study
Infrared Spectroscopic Study of Pyridine Adsorption on $MoO_3 \cdot NiO$ Catalysts Supported on Fluorinated γ-Al_2O_3, 2543
Infrared Spectroscopy
Acidity of Dealuminated Mordenites Studies by Infrared Spectroscopy, 805
Study of the Temperature Dependence of the Mobility of Methane Adsorbed on NaA Zeolite using Infrared Spectroscopy, 2271
Infrared Studies
Infrared Studies of Acid–Base Properties of Vanadium–Titanium Oxide and Oxidation of Alcohols on it, 2343
Infrared Studies of the Effect of Preadsorbed Pyridine on the Oxidation of Butan-2-ol Adsorbed on TiO_2, 2559
Infrared Study
Infrared Study of Acid–Base Properties of Thorium Dioxide, 2219
Infrared Study of the Adsorption of $^{16}O_2$, $^{16}O^{18}O$ and $^{18}O_2$ on Cr_2O_3, 2425
Infrared Study of the Adsorption of Triethylamine at the Rutile/Vapour and Rutile/Heptane Interfaces, 2991
Interfaces
Capillary Phenomena. Part 22.—Stability Regarding Solids Displaced at Interfaces, Pendent-drop Formation and Drainage Models Subject to Various Mechanical Conditions, 2529
Interference Microscopy
Liquid/Liquid/Solid Contact Angles Measured by Interference Microscopy, 2723
Intracrystalline Diffusion
Intracrystalline Diffusion of Benzene in NaX Zeolite Studied by Sorption Kinetics, 2457
Intradiffusion
Relations between Intradiffusion and Viscosity Coefficients. Tests of the Albright Equation, 1327
Iodide
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III) + Iodide Reaction at a Rotating-platinum-disc Catalyst, 491
Ionic Internal Pressures
Structure of Aqueous Electrolyte Solutions. Ionic Internal Pressures and Proton Chemical Shifts, 1123
Ion–Molecule Reactions
Ion–Molecule Reactions in Gaseous Methane + Pentane Mixtures, 1017
Ion–Solvent Interactions
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4^nNBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Iron
Resistivity and Kinetic Measurements of Carbon Dissolution in Alpha and Gamma Iron, 1
Kinetics of Monticular Carbon Growth on Polycrystalline Iron, 15
Microstructure and Stability of Iron Chloride Graphites, 1793
Interaction between Zeolites and Cluster Compounds. Part 1.—Adsorption of Iron Pentacarbonyl on Zeolites, 1819
Iron(III) Oxide
Electrochemistry and Photoelectrochemistry of Iron(III) Oxide, 2027
Iron Phthalocyanines
Mössbauer Study of Iron Phthalocyanines as Catalysts of Cumene Oxidation, 1091
Isobutane
Study of the Methyl–Isobutane Reaction in the Range $478 \leqslant T/K \leqslant 560$, 741
Isobutene
Simulation Experiments. The Virial Equation in the Adsorption of Isobutene on Aerosil, 1833
Isomerism
Mass Spectrometric Study of the Isomerism of Aromatic Aldoximes, 675
Isomerization
Spectroscopic Studies of Butane Isomerization over Platinum Supported on Chlorinated Alumina, 835
Isoperibol Flow Microcalorimeter
Method for the Direct Determination of Enthalpies of Transfer between Immiscible Solvents using an Isoperibol Flow Microcalorimeter, 1311
Isotope Effects
Recoil Tritium Reactions with Molecular Hydrogen. Part 3.—Isotope Effects, 2735

KBr
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
KCl
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Ketene
Photochemical Reactions of Ketene and Diazomethane with 2,3-Dimethyl-2,3-epoxybutane, 2179
Kinetic Measurements
Resistivity and Kinetic Measurements of Carbon Dissolution in Alpha and Gamma Iron, 1
Kinetic Study
Kinetic Study of the Reaction between Carbon Dioxide and Primary Amines, 2103
Kinetics
Kinetics of Monticular Carbon Growth on Polycrystalline Iron, 15
Particle Adhesion and Removal in Model Systems. Part 6.—Kinetics of Deposition of Haematite Particles on Steel, 65
Various Equations for the Kinetics of Chemisorption Derived from a Common Model, 119
Kinetics of the Solvolysis of *trans*-Chloroazidobis(1,2-diaminoethane)cobalt(III) Ions in Water and in Water + Propan-2-ol Mixtures, 253
Kinetics of Solvolytic Reactions. Dependence of Composition on Time and of Rate Parameters on Temperature, 1289
Kinetics of the Thermal Gas-phase Decomposition of Methoxycyclopropane, 1413
Bromination of Fluoroalkanes. Part 5.—Kinetics of Forward and Reverse Reactions in the System $Br_2 + i\text{-}C_3F_7H \rightleftharpoons HBr + i\text{-}C_3F_7Br$, 1471
Kinetics and Mechanism of the Cerium(IV)/Cerium (III) Redox Reaction on a Platinum Electrode, 1741
Kinetics of the Crystallisation of Barium Sulphate. Effects of Additives, Stirring Rate and Barium:Sulphate Ratio on the Rate of Precipitation, 1857
Kinetics and Mechanism of the Quaternization of Poly(4-vinyl pyridine) with Alkyl Iodides, 1951
Kinetics of the Gas-phase Thermal Decomposition of 2,3-Dimethyl-2,3-epoxypentane, 2185
Kinetics of the Solvolysis of the *trans*-Dichlorotetrapyridinecobalt(III) Ion in Water + t-ButylAlcohol Mixtures, 2367
Kinetics of the Substitution of 2,2′-Bipyridine into Aquanickel(II) Ions in Water + Acetonitrile Mixtures, 2439
Kinetics of Propene Hydrogenation over Platinum and Platinum–Tin Catalysts Supported on Polyamide, 2605
Krypton
Thermodynamic Properties of Liquid Mixtures of Krypton + Methane, 1869
Ligand-exchange Kinetics
Ligand-exchange Kinetics in Ternary and Quaternary Surfactant Systems, 1959
Liquid Media
Forces between Mica Surfaces Bearing Adsorbed Macromolecules in Liquid Media, 99
Liquid Mixtures
Thermodynamic Properties of Liquid Mixtures of Krypton + Methane, 1869
Long-chain Aliphatic Ions
Enthalpy Coefficients of Pairwise Interactions between Polar Molecules and Long-chainAliphatic Ions in Water at 298,15 K, 2517
Luminescence
Luminescence of Prophrins and Metalloporphyrins. Part 6.—Luminescence of Aluminium(III) Tetraphenylporphine and its μ-Oxo Dimer, 765
Luminescence and Photoreactivity of 2,5-Distyrylpyrazine Crystals, 1183
Determination of the Absolute Quantum Efficiency of the Luminescence of Crystalline Anthracene and of Meso–Dimeso Derivatives using Photoacoustic Spectroscopy, 2853
Magnesium Oxide
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Isotopic Study of Hydrogen Adsorption on Magnesium Oxide Powders, 913
Temperature-programmed Desorption Study of Carbon Monoxide Adsorbed on Magnesium Oxide, 1373
Magnesium Oxide Powders
O_2^- Formation on Magnesium Oxide Powders containing Preadsorbed Hydrogen, 2277
Magnetic Relaxation
Magnetic Relaxation in Glass-bead/Water Dispersions, 1901
Magnetite
Preparation and Characterization of Magnetite Samples having Different Stoichiometric Compositions, 2449
Radiation Chemistry of Colloidal Haematite and Magnetite in Water. Reductive Dissolution by $(CH_3)_2\dot{C}OH$ Radicals and $Fe^{II}EDTA$, 2961
Maleic Hydrazide
Radical-induced Oxidation of Pyridazine-3,6-diol (Maleic Hydrazide). A Model for Chemiluminescent Cyclic Hydrazides, 1493
Reaction of Radiolytically Generated Hydroxy Radicals with Maleic Hydrazide, 1503
Manganese
Kinetic Study of the Electrolytic Oxidation of Manganese(II) to Manganese(III) in Sulphuric Acid, 417

Manganese (*cont.*)
Electrochemical and Spectroscopic Properties of Manganese Tetra(4-*NN'N''*-trimethylanilinium)porphyrin, 1555
Mass Spectrometric Study
Mass Spectrometric Study of the Isomerism of Aromatic Aldoximes, 675
Mass Spectrometry
Investigation of Precipitated Alumina Structures by Secondary-ion Mass Spectrometry and Electron Paramagnetic Resonance Spectrometry. Part 3.—Structure of an Alumina Coating Precipitated on Rutile Titanium Dioxide, 185
Fast Atom Bombardment Mass Spectrometry (FABMS). A Study of Surface Coverage Effects in FABMS, 1249
Mass-transport
Heterogeneous Catalysis in Solution. Part 22.—Oxidation–Reduction Reactions Catalysed by Electron Transfer through the Solid: Theory for Partial and Complete Mass-transport Control, 481
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III) + Iodide Reaction at a Rotating-platinum-disc Catalyst, 491
Material Transport
Material Transport in Hyperfiltration, 2359
Matrix-isolation Studies
Matrix-isolation Studies by Electronic Spectroscopy of Group IIIA Metal–Water Photochemistry, 1533
Melt Mechanism
A Melt Mechanism for the Thermal Decomposition of Ammonium Dichromate, 2143
Mercury/Water Interface
Adsorption of Bifunctional Nitriles at the Free Water Surface and the Mercury/Water Interface, 2801
Mesophase
Phase Behaviour of Polyoxyethylene Surfactants with Water. Mesophase Structures and Partial Miscibility (Cloud Points), 975
Mesophases
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Metal-chelate Electrolytes
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Metal Hydridocarbonyls
Hydrogen Adsorbed on Platinum and Nickel. Comparison with New Incoherent Inelastic Neutron Scattering Data on some Metal Hydridocarbonyls, 1281
Metal-oxide Catalysts
Oxidation of Methane with Oxygen-18. A Method for the Quantitative Investigation of the Relative Activities of Adsorbed and Lattice Oxygen in Metal-oxide Catalysts, 1421
Metalloporphyrins
Luminescence of Prophrins and Metalloporphyrins. Part 6.—Luminescence of Aluminium(III) Tetraphenylporphine and its μ-Oxo Dimer, 765
Photo-oxidation of Metalloporphyrins in Aqueous Solution, 1335
Metathesis Catalysts
Mechanism of Initiation of the Ring-opening Polymerization and Addition Oligomerization of Norbornene using Unicomponent Metathesis Catalysts, 869
Methane
Rates of Hydroxy Radical Reactions with Methane, Ethane and Propane over the Temperature Range 403–696 K, 689
Ion–Molecule Reactions in Gaseous Methane + Pentane Mixtures, 1017
Oxidation of Methane with Oxygen-18. A Method for the Quantitative Investigation of the Relative Activities of Adsorbed and Lattice Oxygen in Metal-oxide Catalysts, 1421
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 1431
Thermodynamic Properties of Liquid Mixtures of Krypton + Methane, 1869
Determination of the Intracrystalline Diffusion Coefficient of Methane in A Zeolites by Means of Neutron Spin-echo Experiments, 1911
Radiation Effects on Methane in the Presence of Molecular Sieves, 1973
Study of the Temperature Dependence of the Mobility of Methane Adsorbed on NaA Zeolite using Infrared Spectroscopy, 2271
Methanol
Dielectric Properties and Structure of *N*-Methylpropionamide + Methanol Mixtures, 245
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 1.—Alkylation of Toluene with Methanol: Consideration of the Effects of Reaction Parameters on Catalyst Deactivation and the Extent of Polysubstitution, 281
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 2.—Alkylation of Toluene with Methanol: Consideration of the Effects of Catalyst Deactivation on the Primary Product Distribution, 297
Proton Resonance Shifts Induced by Individual Ions in Methanol and their Relationship with O—H Stretching Frequencies. Primary-ion Solvation Numbers, 1273

Methanol (*cont.*)
Pulse Radiolysis and Product Analysis of 1,1-Diphenylethylene and Related Compounds in Methanol, 2389
Resonance Raman Spectra and Micellisation of a Surface-active Dye in Aqueous Methanol Solutions, 2843
The Setchenov Constant of Benzene in Non-aqueous Electrolyte Solutions. Alkali-metal Halides and Aliphatic and Aromatic Salts in Methanol at 298.15 K, 2915
Methoxycyclopropane
Kinetics of the Thermal Gas-phase Decomposition of Methoxycyclopropane, 1413
Methyl
Study of the Methyl–Isobutane Reaction in the Range $478 \leqslant T/K \leqslant 560$, 741
Reaction of Methyl Radicals with Formaldehyde in the Range $500 \leqslant T/K \leqslant 603$, 749
Methylene
Chemical Activation Study of the Reactions of Methylene with Oxetan and 3,3-Dimethyloxetan, 1237
Methylene Blue Dimerization
Effects of Solvent on Stacking Interactions. A Spectrophotometric Study of Methylene Blue Dimerization in Aqueous Solutions of some Monohydric Alcohols, 1085
Methylpropene
Reactions of 2-Methylpropene and other Alkenes on Zinc Oxide, 2899
***N*-Methylpropionamide**
Dielectric Properties and Structure of *N*-Methylpropionamide + Methanol Mixtures, 245
MgO–ZnO
Characterization of the Surfaces of MgO–ZnO Solid Solutions by CO and H_2 Adsorption at Room Temperature, 1843
Mica Surfaces
Forces between Mica Surfaces Bearing Adsorbed Macromolecules in Liquid Media, 99
Micellisation
Resonance Raman Spectra and Micellisation of a Surface-active Dye in Aqueous Methanol Solutions, 2843
Microcalorimetric Study
Solute Interactions in Dilute Aqueous Solutions. Part 5.—Microcalorimetric Study of Polyols and their Mixtures with Alkanols, 2249
Microemulsion
Time-resolved Studies of Fluorescence Quenching in a Water-in-oil Microemulsion, 2161
Microporous Adsorbents
Adsorption Interaction of Water with Microporous Adsorbents. Part 1.—Water-vapour Adsorption on Activated Carbon Cloth, 1147
Adsorption Interaction of Water with Microporous Adsorbents. Part 2.—Enthalpy of Immersion and Thermal-desorption Studies, 1157
Adsorption Interaction of Water with Microporous Adsorbents. Part 3.—Dependence of Adsorption–Desorption Hystereses on Extent of Activation, 1165
Miscibility
Phase Behaviour of Polyoxyethylene Surfactants with Water. Mesophase Structures and Partial Miscibility (Cloud Points), 975
Mixed Solvents
Relationship between the Enthalpy of Transfer of a Solute and the Thermodynamic Mixing Functions of Mixed Solvents, 1061
$MnCO_3$–$CaCO_3$
Physico-chemical Properties of $MnCO_3$–$CaCO_3$ and MnO–CaO Solid Solutions, 1215
MnO_2–CuO Catalysts
Thermal Analysis of MnO_2–CuO Catalysts, 1633
MnO–CaO Solid Solutions
Physico-chemical Properties of $MnCO_3$–$CaCO_3$ and MnO–CaO Solid Solutions, 1215
Mobilities
Molar Volumes and Mobilities of Some Divalent Transition Metal-metal in Dimethylformamide, 2319
Molar Volumes
Molar Volumes and Mobilities of Some Divalent Transition Metal-metal in Dimethylformamide, 2319
Molecular Sieves
Radiation Effects on Methane in the Presence of Molecular Sieves, 1973
Molecular Solids
Activation of Electronic Conduction in Molecular Solids by Adsorbed Water, 705
Molten Cs_2SO_4
Structural Analysis of Molten Cs_2SO_4, 2997
Molten Salt Systems
Calculation of Phase Equilibria of Ternary Additive Molten Salt Systems with a Common Anion, 2171
Molybdophosphates
X-ray Photoelectron Spectroscopy, X-ray Auger Electron Spectroscopy and Electron Spin Resonance Studies of the Reduction of Some Solid Metal 12-Molybdophosphates, 2467
Monohydric Alcohols
Effects of Solvent on Stacking Interactions. A Spectrophotometric Study of Methylene Blue Dimerization in Aqueous Solutions of some Monohydric Alcohols, 1085
Monolayers
Influence of Salts on Poly(vinyl methyl ether) at the Air/Aqueous-solution Interface. Part 1.—Spread Monolayers, 755
Montmorillonite
Particle Orientation Distributions and Stacking Arrangements in Size-fractionated Montmorillonite Measured by Neutron and X-ray Diffraction, 1687
MoO_3·NiO Catalysts
Infrared Spectroscopic Study of Pyridine Adsorption on MoO_3·NiO Catalysts Supported on Fluorinated γ-Al_2O_3, 2543

H-Mordenite
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Study of Small-port and Large-port Mordenite Modifications. Part 1.—Preparation of the HM Forms, 2299
Purification of Gases in H-Mordenite Modified with Silane and Diborane, 2821
Encapsulation of Gases in H-Mordenite Modified with Silane and Diborane, 2835
Mordenites
Acidity of Dealuminated Mordenites Studies by Infrared Spectroscopy, 805
Mössbauer Study
Mössbauer Study of Iron Phthalocyanines as Catalysts of Cumene Oxidation, 1091
Cation Site Population in Amphibole Asbestos. A Mössbauer Study, 1451
Muonic Radical Formation
Selectivity of Muonic Radical Formation in Methyl-substituted Buta-1,3-dienes, 1939
n-Type Semiconductor Electrodes
Relationship between Stabilization and Photocurrent at n-Type Semiconductor Electrodes on the Basis of a Model Including Surface Recombination through Decomposition Intermediates, 1391
NaA Zeolite
Study of the Temperature Dependence of the Mobility of Methane Adsorbed on NaA Zeolite using Infrared Spectroscopy, 2271
NaBr
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
NaCl
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
NaI
Enthalpy of Solution of NaI in Glycerol + Aliphatic Alcohol Mixtures at 313.15 K, 2879
Naphthazarin
Reduction of the Naphthazarin Molecule as Studied by Pulse Radiolysis. Part 1.—Addition of a Single Electron, 391
Reduction of the Naphthazarin Molecule as Studied by Pulse Radiolysis. Part 2.—Second One-electron Step, 405
NaX Zeolite
Intracrystalline Diffusion of Benzene in NaX Zeolite Studied by Sorption Kinetics, 2457
Near-infrared
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Neopentane
Sorption Kinetics of Neopentane on NaX Zeolites of Different Crystal Sizes, 1099
Neutron
Particle Orientation Distributions and Stacking Arrangements in Size-fractionated Montmorillonite Measured by Neutron and X-ray Diffraction, 1687
Neutron Scattering
Determination of Structure in Oxide Sols and Gels From Neutral Scattering and Nitrogen Adsorption Measurements, 173
Hydrogen Adsorbed on Platinum and Nickel. Comparison with New Incoherent Inelastic Neutron Scattering Data on some Metal Hydridocarbonyls, 1281
Neutron Spin–echo Experiments
Determination of the Intracrystalline Diffusion Coefficient of Methane in A Zeolites by Means of Neutron Spin-echo Experiments, 1911
Ni^{2+}
Extended X-ray Absorption Fine Structure Investigation of Local Symmetry Changes in Co^{2+} and Ni^{2+}-exchanged Zirconium Phosphates, 1039
Nickel
Particle-size Distribution of Nickel Dispersed on Silica and its Effects on Hydrogenation of Propionaldehyde, 127
Hydrogen Adsorbed on Platinum and Nickel. Comparison with New Incoherent Inelastic Neutron Scattering Data on some Metal Hydridocarbonyls, 1281
Nickel Oxide
Studies on Nickel Oxide Mixed Catalysts. Part 12.—Characterization of NiO/Al_2O_3–SiO_2 Catalysts, 2013
Nickel Peroxide
Studies of the Thermal Decomposition of βNiO(OH) and Nickel Peroxide by X-ray Photoelectron Spectroscopy, 1769
Nickel(II)Ions
Conductance Stopped-flow Study of the Complexation Reaction of Poly(4-vinvylpyridine) with Nickel(II) Ions, 1639
Nickel–Silica
Hydrogenation of Acetylene over Supported Metal Catalysts. Part 4.—[^{14}C] Tracer Studies of the Reaction Catalysed by Nickel–Silica, 195
Nitrate Ion
Measurements of Self-diffusion Coefficients of the Nitrate Ion in Aqueous Solutions of Potassium Nitrate and Calcium Nitrate, 1765
Nitriles
Adsorption of Bifunctional Nitriles at the Free Water Surface and the Mercury/Water Interface, 2801

Nitrobenzene
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Free Energies of Transfer of 1:1 Electrolytes from Water to Nitrobenzene. Partition of Ions in the Water + Nitrobenzene System, 2713
Nitrogen-15
Electron Spin Resonance Investigation of Sulphur-33 and Nitrogen-15 Substituted Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 925
Non-equilibrium Thermodynamics
Viscous Effects in the Frictional Formalism of Non-equilibrium Thermodynamics, 2355
Norbornene
Mechanism of Initiation of the Ring-opening Polymerization and Addition Oligomerization of Norbornene using Unicomponent Metathesis Catalysts, 869
Noüy Ring Tensiometry
Wall Effects in du Noüy Ring Tensiometry Theory and Experiment, 1701
Nuclear Magnetic Resonance
Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Ethylenediaminetetra-acetic acid (EDTA) in Aqueous Solution, 543
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Nuclear Magnetic Resonance Measurements
Fourier-transform Nuclear Magnetic Resonance Measurements of Self-diffusion in the 1,1,2,2-Tetrabromoethane + n-Akylbenzene System. Comment on Approximate Hydrodynamic Models for the Interpretation of Diffusion Data, 1351
Nuclear Quadrupole Resonance
^{35}Cl Nuclear Quadrupole Resonance and Infrared Spectroscopic Studies of 2,6-Dichloro-4-nitrophenol–Amine Hydrogen-bonded Adducts, 2005
O_3^- Formation
O_3^- Formation on Magnesium Oxide Powders containing Preadsorbed Hydrogen, 2277
Oil Shale
Vanadyls from Oil Shale Rotational Motion Studied by Electron Spin Resonance Spectroscopy, 1733
Olefins
Electronic Quenching of Pyrene $^1B_{1u}$ by Olefins in the Vapour Phase, 235
Oligomerization
Mechanism of Initiation of the Ring-opening Polymerization and Addition Oligomerization of Norbornene using Unicomponent Metathesis Catalysts, 869
Oligo(oxyethylene)s
Enthalpy and Volume Changes on Mixing Oligo(oxyethylene)s and n-Alkanes, 2695
Optical Microscopy
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Oscillatory Phenomena
Some Statements Concerning Oscillatory Phenomena, 39
Oxetan
Chemical Activation Study of the Reactions of Methylene with Oxetan and 3,3-Dimethyloxetan, 1237
Oxidation
Oxidation of Methane with Oxygen-18. A Method for the Quantitative Investigation of the Relative Activities of Adsorbed and Lattice Oxygen in Metal-oxide Catalysts, 1421
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 1431
Radical-induced Oxidation of Pyridazine-3,6-diol (Maleic Hydrazide). A Model for Chemiluminescent Cyclic Hydrazides, 1493
Infrared Studies of Acid–Base Properties of Vanadium–Titanium Oxide and Oxidation of Alcohols on it, 2343
Oxidation–Reduction
Heterogeneous Catalysis in Solution. Part 22.—Oxidation–Reduction Reactions Catalysed by Electron Transfer through the Solid: Theory for Partial and Complete Mass-transport Control, 481
Oxide Sols
Determination of Structure in Oxide Sols and Gels From Neutral Scattering and Nitrogen Adsorption Measurements, 173
Oxychlorination Catalysis
Oxychlorination Catalysis, Ethylene Adsorption and Conductivity Studies on Copper Chlorides, 343
Oxygen
Electrochemistry of Ruthenates. Part 1.—Oxygen Reduction on Pyrochlore Ruthenates, 893
Oxidation of Methane with Oxygen-18. A Method for the Quantitative Investigation of the Relative Activities of Adsorbed and Lattice Oxygen in Metal-oxide Catalysts, 1421

Oxygen (*cont.*)
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 147
Chemisorption of Oxygen at Ag(110) Surfaces and its Role in Adsorbate Activation, 1779
Stoichiometry and Rate of Reaction of Hydrogen Atoms with Oxygen, 2597
Oxygenated Radicals
Reactions of Oxygenated Radicals in the Gas Phase. Self-reactions of Ethylperoxy Radicals, 505
Ozone
Spectroscopy and Mechanism of Chemiluminescent Reactions between Group V Hydrides and Ozone, 527
Pairwise Interactions
Enthalpy Coefficients of Pairwise Interactions between Polar Molecules and Long-chainAliphatic Ions in Water at 298,15 K, 2517
Palladium Phosphide
Solution of Hydrogen and Deuterium in Palladium Phosphide, Pd_3P, 1605
Paraquat
Photoinduced Electron Transfer in the Paraquat–Thiourea Molecular Complex, 55
Partial Molal Volume
Size, Shape and Charge Effects in the Partial Molal Volume, Compressibility in Electrostriction Behaviour of Sulphur and Chlorine Oxyanions in Water, 1357
Particle Orientation Distributions
Particle Orientation Distributions and Stacking Arrangements in Size-fractionated Montmorillonite Measured by Neutron and X-ray Diffraction, 1687
Particle-size Distribution
Particle-size Distribution of Nickel Dispersed on Silica and its Effects on Hydrogenation of Propionaldehyde, 127
Pendent-drop Formation
Capillary Phenomena. Part 22.—Stability Regarding Solids Displaced at Interfaces, Pendent-drop Formation and Drainage Models Subject to Various Mechanical Conditions, 2529
Pentane
Ion–Molecule Reactions in Gaseous Methane + Pentane Mixtures, 1017
Pentane-1,5-diol
Dynamic Studies of the Interaction between Diols and Water by Ultrasonic Methods. Part 2.—Pentane-1,5-diol and Hexane-1,6-diol Solutions, 2651
Permeability
Study of Gas Relative Permeability in a Mesoporous Alumina Pellet, 517
Perylene
Electron Transfer at Alumina Surfaces. Part 7.—Nature of the Radical Species Formed from Perylene on the Surface of an Activated Alumina—Cation or Anion?, 1009
pH Measurement
Ring–Disc Electrodes. Part 21.—pH Measurement with the Ring, 2583
Phase Equilibria
Calculation of Phase Equilibria of Ternary Additive Molten Salt Systems with a Common Anion, 2171
Phase Transition
Effect of Pressure on the Phase Transition of the $(C_6H_5)_3PCH[_2]^+$ $(TCNQ)_2^{\cdot-}$Anion Radical Salt as Studied by Differential Thermal Analysis under Pressure, 1757
Phenothiazine Drugs
Self-association of Phenothiazine Drugs in Aqueous Solutions of High Ionic Strength, 2669
Phosphate
Mechanism of the Inhibiting Effect of Phosphate on the Anatase→Rutile Transformation Induced by Thermal and Mechanical Treatment of TiO_2, 2765
Phosphorus
The Retarded Sublimation of Red Phosphorus, 383
Photo-oxidation
Photo-oxidation of Metalloporphyrins in Aqueous Solution, 1335
Photoacoustic Spectroscopy
Determination of the Absolute Quantum Efficiency of the Luminescence of Crystalline Anthracene and of Meso–Dimeso Derivatives using Photoacoustic Spectroscopy, 2853
Photocatalytic Oxidation
Photocatalytic Oxidation of Liquid Propan-2-ol by Titanium Dioxide, 1381
Photocatalytic Oxidation of Liquid Alcohols and Binary Alcohol Mixtures by Rutile, 2975
Photochemical Reactions
Photochemical Reactions of Ketene and Diazomethane with 2,3-Dimethyl-2,3-epoxybutane, 2179
Photochemistry
Photochemistry of Anthraquinone-2-sodium Methylsulphonate in Aqueous Solutions, 1721
Photoconductivity
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651
Photocurrent
Relationship between Stabilization and Photocurrent at n-Type Semiconductor Electrodes on the Basis of a Model Including Surface Recombination through Decomposition Intermediates, 1391
Photodimer
Photoreactivity of 9-Cyanoanthracene Thermally Generated inside 9-Cyanoanthracene Photodimer Single Crystals, 2133

Photoelectrochemical Kinetics
Role of Decomposition-induced and Other Surface States in the Photoelectrochemical Kinetics of n-GaP/Fe^{3+}, 2813
Photoelectrochemical Studies
Photoelectrochemical Studies with n-Type CdO, 2875
Photoelectrochemistry
Electrochemistry and Photoelectrochemistry of Iron(III) Oxide, 2027
Photoelectrolysis
New Anode Materials for Photoelectrolysis, 1199
Photoinduced Oxygen Formation
Photoinduced Oxygen Formation and Silver-metal Deposition in Aqueous Solutions of Various Silver Salts by Suspended Titanium Dioxide Powder, 2685
Photoreactivity
Luminescence and Photoreactivity of 2,5-Distyrylpyrazine Crystals, 1183
Photoreactivity of 9-Cyanoanthracene Thermally Generated inside 9-Cyanoanthracene Photodimer Single Crystals, 2133
Photoreduction
Triplet-mediated Photoreduction of Viologens by Aromatic Hydrocarbons. A Laser Flash-photolysis Study, 1135
Platinum
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651
Spectroscopic Studies of Butane Isomerization over Platinum Supported on Chlorinated Alumina, 835
Hydrogen Adsorbed on Platinum and Nickel. Comparison with New Incoherent Inelastic Neutron Scattering Data on some Metal Hydridocarbonyls, 1281
Kinetics and Mechanism of the Cerium(IV)/Cerium (III) Redox Reaction on a Platinum Electrode, 1741
Kinetics of Propene Hydrogenation over Platinum and Platinum–Tin Catalysts Supported on Polyamide, 2605
Platinum Electrode
Electroreduction of Buta-1,2-diene on a Platinum Electrode in Sulphuric Acid Solution, 1027
Platinum–Tin Catalysts
Kinetics of Propene Hydrogenation over Platinum and Platinum–Tin Catalysts Supported on Polyamide, 2605
Polar Molecules
Enthalpy Coefficients of Pairwise Interactions between Polar Molecules and Long-chainAliphatic Ions in Water at 298,15 K, 2517
Poly(styrenesulphonic acid)
Heats of Mixing of Poly(styrenesulphonic acid) and its Tetramethylammonium Salt with Alkali-metal Poly(styrenesulphonates) in Dioxan + Water Mixtures, 699
Influence of Salts on Poly(vinyl methyl ether) at the Air/Aqueous-solution Interface. Part 1.—Spread Monolayers, 755
Conductance Stopped-flow Study of the Complexation Reaction of Poly(4-vinylpyridine) with Nickel(II) Ions, 1639
Kinetics and Mechanism of the Quaternization of Poly(4-vinyl pyridine) with Alkyl Iodides, 1951
Complex Formation of Alkali Chlorides with Benzo-18-crown-6 Incorporated in Poly(Vinyl Alcohol) in Water + Dioxane and Water + Tetrahydrofuran Mixtures, 2153
Polyamide
Kinetics of Propene Hydrogenation over Platinum and Platinum–Tin Catalysts Supported on Polyamide, 2605
Polyelectrolytes
Electrolytic Conductivity of Branched Polyelectrolytes, 1403
Adsorption and Exchange of Polyelectrolytes on Crystal Surfaces, 2745
Polymerization
Mechanism of Initiation of the Ring-opening Polymerization and Addition Oligomerization of Norbornene using Unicomponent Metathesis Catalysts, 869
Styrene Emulsion Polymerization. The Effects of Initiator Charge, 1257
Polyols
Solute Interactions in Dilute Aqueous Solutions. Part 5.—Microcalorimetric Study of Polyols and their Mixtures with Alkanols, 2249
Polyoxyethylene Surfactants
Phase Behaviour of Polyoxyethylene Surfactants with Water. Mesophase Structures and Partial Miscibility (Cloud Points), 975
Polypentapeptide
Test of the Librational Entropy Mechanisms of Elasticity of the Polypentapeptide of Elastin. Effect of Introducing a Methyl Group at Residue 5, 853
Polystyrene
Colloid Stability of Casein-coated Polystyrene Particles, 2937
Polysubstitution
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 1.—Alkylation of Toluene with Methanol: Consideration of the Effects of Reaction Parameters on Catalyst Deactivation and the Extent of Polysubstitution, 281
Pore Structure
Development of Pore Structure in Carbon Cloth by HNO_3 Activation, 1173
Potassium Nitrate
Measurements of Self-diffusion Coefficients of the Nitrate Ion in Aqueous Solutions of Potassium Nitrate and Calcium Nitrate, 1765
Precipitation
Kinetics of the Crystallisation of Barium Sulphate. Effects of Additives, Stirring Rate and Barium:Sulphate Ratio on the Rate of Precipitation, 1857

Pressure
Effect of Pressure on the Phase Transition of the $(C_6H_5)_3PCH[_2]^+$ $(TCNQ)_2^-$ Anion Radical Salt as Studied by Differential Thermal Analysis under Pressure, 1757
Product Distribution
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 2.—Alkylation of Toluene with Methanol: Consideration of the Effects of Catalyst Deactivation on the Primary Product Distribution, 297
Propan-2-ol
Kinetics of the Solvolysis of *trans*-Chloroazidobis(1,2-diaminoethane)cobalt(III) Ions in Water and in Water + Propan-2-ol Mixtures, 253
Photocatalytic Oxidation of Liquid Propan-2-ol by Titanium Dioxide, 1381
Propane
Rates of Hydroxy Radical Reactions with Methane, Ethane and Propane over the Temperature Range 403–696 K, 689
Propene
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Kinetics of Propene Hydrogenation over Platinum and Platinum–Tin Catalysts Supported on Polyamide, 2605
Propionaldehyde
Particle-size Distribution of Nickel Dispersed on Silica and its Effects on Hydrogenation of Propionaldehyde, 127
Propionitrile
Pyrolysis of Propionitrile and the Resonance Stabilisation Energy of the Cyanomethyl Radical, 2755
n-Propyl Alcohol
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Proton Magnetic Relaxation
Proton Magnetic Relaxation Mechanisms and Solution Dynamics of L-**Histidine**, 2955
Proton Resonance Shifts
Proton Resonance Shifts Induced by Individual Ions in Methanol and their Relationship with O—H Stretching Frequencies. Primary-ion Solvation Numbers, 1273
Proton-transfer Equilibria
Proton-transfer Equilibria for N-base–Trimethyl-*N*-oxide Cation Systems in Acetonitrile, 1523
Proton-transfer Mechanism
Proton-transfer Mechanism in the Decarboxylation of Ammonium Trichloroacetate in Acetonitrile, 1987
Proton-transfer Reactions
Further Models for Proton-transfer Reactions, 2229
Prussian Blue
Studies of Different Hydrated Forms of Prussian Blue, 1513
Pulse Radiolysis
Pulse Radiolysis and Product Analysis of 1,1-Diphenylethylene and Related Compounds in Methanol, 2389
Pulsed Alkene Titration
A Pulsed Alkene Titration Investigation of Reverse Hydrogen Spillover, 2639
Purification of Gases
Purification of Gases in H-Mordenite Modified with Silane and Diborane, 2821
Pyrene
Electronic Quenching of Pyrene $^1B_{1u}$ by Olefins in the Vapour Phase, 235
Pyridazine-3,6-diol
Radical-induced Oxidation of Pyridazine-3,6-diol (Maleic Hydrazide). A Model for Chemiluminescent Cyclic Hydrazides, 1493
Pyridine
Infrared Spectroscopic Study of Pyridine Adsorption on $MoO_3 \cdot NiO$ Catalysts Supported on Fluorinated γ-Al_2O_3, 2543
Infrared Studies of the Effect of Preadsorbed Pyridine on the Oxidation of Butan-2-ol Adsorbed on TiO_2, 2559
Pyrochlore
Electrochemistry of Ruthenates. Part 1.—Oxygen Reduction on Pyrochlore Ruthenates, 893
Pyrolysis
Pyrolysis of Propionitrile and the Resonance Stabilisation Energy of the Cyanomethyl Radical, 2755
Quantum-chemical Study
Chromium Ions within Zeolites. Part 2.—A Quantum-chemical Study of the Properties of Chromium Ions in Faujasites, 1585
Quaternization
Kinetics and Mechanism of the Quaternization of Poly(4-vinyl pyridine) with Alkyl Iodides, 1951
Quenching Fluorescence
Electron Donor–Acceptor Interactions in the Quenching of Aromatic Hydrocarbon Fluorescence. The Effects of Temperature and Solvent Permittivity, 221
Radiation Chemistry
Radiation Chemistry of Colloidal Haematite and Magnetite in Water. Reductive Dissolution by $(CH_3)_2\dot{C}OH$ Radicals and $Fe^{II}EDTA$, 2961
Radiation Effects
Radiation Effects on Methane in the Presence of Molecular Sieves, 1973
Radical Cations
Radical Cations of Halogenobenzenes. An Electron Spin Resonance Study, 1931

Radiolysis
Reduction of the Naphthazarin Molecule as Studied by Pulse Radiolysis. Part 1.—Addition of a Single Electron, 391
Reduction of the Naphthazarin Molecule as Studied by Pulse Radiolysis. Part 2.—Second One-electron Step, 405
Formation and Dimerization of Vinylic Radical Anions and Ion Pairs. A Pulse Radiolysis Study, 589
Effect of Copper(II) Ions on the γ-Radiolysis of Uracil, 2613
Radiolytic
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Raman Spectra
Raman Spectra of Adsorbed Ammonia on Carbon-overlayered Silver Electrodes, 2887
Raney-nickel
Characterization of Raney-nickel Fuel-cell Electrodes by Impedance Measurements, 823
Rare-earth Intermetallic Compound $SmMg_3$
Hydrogen Spillover onto the Rare-earth Intermetallic Compound $SmMg_3$, 1461
Reactions
Reactions for Chemical Systems far from Equilibrium, 75
Recoil Tritium Reactions
Recoil Tritium Reactions with Molecular Hydrogen. Part 3.—Isotope Effects, 2735
Redox Reaction
Kinetics and Mechanism of the Cerium(IV)/Cerium (III) Redox Reaction on a Platinum Electrode, 1741
Redox System
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III)+Iodide Reaction at a Rotating-platinum-disc Catalyst, 491
Reduction
Electrochemistry of Ruthenates. Part 1.—Oxygen Reduction on Pyrochlore Ruthenates, 893
Repolarization
Calculation of the Energy of Repolarization for a 'Soft-charge' Electron-transfer Transition, 797
Resistivity
Resistivity and Kinetic Measurements of Carbon Dissolution in Alpha and Gamma Iron, 1
Resonance Raman Spectra
Resonance Raman Spectra and Micellisation of a Surface-active Dye in Aqueous Methanol Solutions, 2843
Retarded Sublimation
The Retarded Sublimation of Red Phosphorus, 383
Reverse Hydrogen Spillover
A Pulsed Alkene Titration Investigation of Reverse Hydrogen Spillover, 2639
Rhodium
Effects of Preparation Procedure on the Surface Properties of Rhodium Supported on γ-Alumina, 2405
Ring–Disc Electrodes
Ring–Disc Electrodes. Part 21.—pH Measurement with the Ring, 2583
Rotating-disc Electrodes
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
Rotating-platinum-disc Catalyst
Heterogeneous Catalysis in Solution. Part 23.—Kinetics of a Redox System Showing Complete Mass-transport Control: The Hexacyanoferrate(III)+Iodide Reaction at a Rotating-platinum-disc Catalyst, 491
Rotational Correlation Times
Rotational Correlation Times and Radii of Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 439
Rotational Motion
Vanadyls from Oil Shale Rotational Motion Studied by Electron Spin Resonance Spectroscopy, 1733
Ruthenates
Electrochemistry of Ruthenates. Part 1.—Oxygen Reduction on Pyrochlore Ruthenates, 893
Rutile
Photocatalytic Oxidation of Liquid Alcohols and Binary Alcohol Mixtures by Rutile, 2975
Infrared Study of the Adsorption of Triethylamine at the Rutile/Vapour and Rutile/Heptane Interfaces, 2991
Self-association
Self-association of Phenothiazine Drugs in Aqueous Solutions of High Ionic Strength, 2669
Self-diffusion
Fourier-transform Nuclear Magnetic Resonance Measurements of Self-diffusion in the 1,1,2,2-Tetrabromoethane+n-Akylbenzene System. Comment on Approximate Hydrodynamic Models for the Interpretation of Diffusion Data, 1351
Self-diffusion Coefficients
Measurements of Self-diffusion Coefficients of the Nitrate Ion in Aqueous Solutions of Potassium Nitrate and Calcium Nitrate, 1765
Semiconductor Electrochemistry
Alternating-current Techniques in Semiconductor Electrochemistry, 2111
Setchenov Constant
The Setchenov Constant of Benzene in Non-aqueous Electrolyte Solutions. Alkali-metal Halides and Aliphatic and Aromatic Salts in Methanol at 298.15 K, 2915
Silane
Purification of Gases in H-Mordenite Modified with Silane and Diborane, 2821
Encapsulation of Gases in H-Mordenite Modified with Silane and Diborane, 2835
Silica
Particle-size Distribution of Nickel Dispersed on Silica and its Effects on Hydrogenation of Propionaldehyde, 127
Infrared Study of Three Butandiols Adsorbed on Silica Immersed in Carbon Tetrachloride, 263

Silica (*cont.*)
Adsorption of Some Divalent Cations from Aqueous Solution on Precipitated Silica, 2311
Silicon-containing Compounds
Thermochemistry of Silicon-containing Compounds. Part 1.—Silicon–Halogen Compounds, an Evaluation, 2233
Silicon–Halogen Compounds
Thermochemistry of Silicon-containing Compounds. Part 1.—Silicon–Halogen Compounds, an Evaluation, 2233
Silver Electrodes
Raman Spectra of Adsorbed Ammonia on Carbon-overlayered Silver Electrodes, 2887
Silver-metal Deposition
Photoinduced Oxygen Formation and Silver-metal Deposition in Aqueous Solutions of Various Silver Salts by Suspended Titanium Dioxide Powder, 2685
Silver Salts
Photoinduced Oxygen Formation and Silver-metal Deposition in Aqueous Solutions of Various Silver Salts by Suspended Titanium Dioxide Powder, 2685
Silyl Radicals
Use of Spin Traps in the Study of Silyl Radicals in the Gas Phase, 2705
Simulation Experiments
Simulation Experiments. The Virial Equation in the Adsorption of Isobutene on Aerosil, 1833
Sodium n-Alkanoate
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Solid-state Reactions
Hysteresis in Solid-state Reactions, 2043
Solute Interactions
Solute Interactions in Dilute Aqueous Solutions. Part 5.—Microcalorimetric Study of Polyols and their Mixtures with Alkanols, 2249
Solution Dynamics
Proton Magnetic Relaxation Mechanisms and Solution Dynamics of L-**Histidine**, 2955
Solvation Numbers
Proton Resonance Shifts Induced by Individual Ions in Methanol and their Relationship with O—H Stretching Frequencies. Primary-ion Solvation Numbers, 1273
Solvolysis
Kinetics of the Solvolysis of *trans*-Chloroazidobis(1,2-diaminoethane)cobalt(III) Ions in Water and in Water + Propan-2-ol Mixtures, 253
Kinetics of the Solvolysis of the *trans*-Dichlorotetrapyridinecobalt(III) Ion in Water + t-ButylAlcohol Mixtures, 2367
Solvolytic Reactions
Kinetics of Solvolytic Reactions. Dependence of Composition on Time and of Rate Parameters on Temperature, 1289
Interpretation of the Temperature Dependence of the Arrhenius Activation Energy in Solvolytic Reactions, 1483
Sorption Kinetics
Sorption Kinetics of Neopentane on NaX Zeolites of Different Crystal Sizes, 1099
Intracrystalline Diffusion of Benzene in NaX Zeolite Studied by Sorption Kinetics, 2457
Sorption Studies
Sorption Studies on Dealuminated and Decationated Zeolites, 1679
Spectrophotometric Study
Effects of Solvent on Stacking Interactions. A Spectrophotometric Study of Methylene Blue Dimerization in Aqueous Solutions of some Monohydric Alcohols, 1085
Spectroscopic Properties
Electrochemical and Spectroscopic Properties of Manganese Tetra(4-*NN'N''*-trimethylanilinium)porphyrin, 1555
Spin Traps
Use of Spin Traps in the Study of Silyl Radicals in the Gas Phase, 2705
Stabilization
Relationship between Stabilization and Photocurrent at n-Type Semiconductor Electrodes on the Basis of a Model Including Surface Recombination through Decomposition Intermediates, 1391
Stacking Arrangements
Particle Orientation Distributions and Stacking Arrangements in Size-fractionated Montmorillonite Measured by Neutron and X-ray Diffraction, 1687
Stacking Interactions
Effects of Solvent on Stacking Interactions. A Spectrophotometric Study of Methylene Blue Dimerization in Aqueous Solutions of some Monohydric Alcohols, 1085
Steel
Particle Adhesion and Removal in Model Systems. Part 6.—Kinetics of Deposition of Haematite Particles on Steel, 65
Strontium Oxide
Infrared Spectroscopic Study of Molecular and Dissociative Adsorption of Ammonia on Magnesium Oxide, Calcium Oxide and Strontium Oxide, 607
Strontium Oxide Powders
Formation of Surface States on Strontium Oxide Powders, 1881
Structural Analysis
Structural Analysis of Molten Cs_2SO_4, 2997
Styrene
Styrene Emulsion Polymerization. The Effects of Initiator Charge, 1257
Sugars
Enthalpies and Heat Capacities of Transfer of Some Sugars from Water to Aqueous Urea, 1303
Sulphur-33
Electron Spin Resonance Investigation of Sulphur-33 and Nitrogen-15 Substituted

Sulphur-33 (*cont.*)
Dithiazol-2-yl and Dithiazolidin-2-yl Free Radicals, 925
Sulphur
Size, Shape and Charge Effects in the Partial Molal Volume, Compressibility in Electrostriction Behaviour of Sulphur and Chlorine Oxyanions in Water, 1357
Sulphuric Acid
Kinetic Study of the Electrolytic Oxidation of Manganese(II) to Manganese(III) in Sulphuric Acid, 417
Electroreduction of Buta-1,2-diene on a Platinum Electrode in Sulphuric Acid Solution, 1027
Supported Metal Catalysts
Hydrogenation of Acetylene over Supported Metal Catalysts. Part 4.—[^{14}C] Tracer Studies of the Reaction Catalysed by Nickel–Silica, 195
Surface
Colloidal Catalysis. Transport *versus* Surface Control, 1649
Surface-active Dye
Resonance Raman Spectra and Micellisation of a Surface-active Dye in Aqueous Methanol Solutions, 2843
Surface Coverage
Fast Atom Bombardment Mass Spectrometry (FABMS). A Study of Surface Coverage Effects in FABMS, 1249
Surface Layers
Reorganization of Surface Layers of Crystal Hydrates in Dehydration/Rehydration Experiments, 1599
Surface Properties
Effects of Preparation Procedure on the Surface Properties of Rhodium Supported on γ-Alumina, 2405
Surface Recombination
Relationship between Stabilization and Photocurrent at n-Type Semiconductor Electrodes on the Basis of a Model Including Surface Recombination through Decomposition Intermediates, 1391
Surface States
Formation of Surface States on Strontium Oxide Powders, 1881
Role of Decomposition-induced and Other Surface States in the Photoelectrochemical Kinetics of n-GaP/Fe^{2+}, 2813
Surfaces
Characterization of the Surfaces of MgO–ZnO Solid Solutions by CO and H_2 Adsorption at Room Temperature, 1843
Surfactant Systems
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Ligand-exchange Kinetics in Ternary and Quaternary Surfactant Systems, 1959
Surfactants
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethoxysulphate Surfactants in Concentrated Micellar Solutions. Part 1.—Effects of Acid and Surfactant Concentrations and of the Nature and Concentration of Counterions, 953
Kinetics of the Acid-catalysed Hydrolysis of Dodecylsulphate and Dodecyldiethioxysulphate Surfactants in Concentrated Micellar Solutions. Part 2.—Effects of Added Electrolytes on the Hydrolysis of Sodium Dodecylsulphate and Sodium Dodecyldiethoxysulphate, 965
Synergy Effects
Synergy Effects in the Catalytic Properties of Bismuth Molybdates, 1921
Synthetic Goethite
A High-resolution Electron Microscopy Examination of Domain Boundaries in Crystals of Synthetic Goethite, 2679
TCNQ
Effect of Pressure on the Phase Transition of the $(C_6H_5)_3PCH[_2]^+$ $(TCNQ)_2^{\cdot -}$ Anion Radical Salt as Studied by Differential Thermal Analysis under Pressure, 1757
Temperature Gradients
Temperature Gradients and Activation Energies on Catalytic Wires, 669
Temperature-programmed Desorption
Temperature-programmed Desorption Study of Carbon Monoxide Adsorbed on Magnesium Oxide, 1373
Temperature-programmed Reduction
Chromium Ions within Zeolites. Part 1.—Infrared, Electron Spin Resonance and Temperature-programmed Reduction Studies of the Valence States of Chromium Ions, 1573
1,1,2,2-Tetrabromethane
Fourier-transform Nuclear Magnetic Resonance Measurements of Self-diffusion in the 1,1,2,2-Tetrabromoethane + n-Akylbenzene System. Comment on Approximate Hydrodynamic Models for the Interpretation of Diffusion Data, 1351
Tetrabutylammonium Tetrabutylborate
Separation of Viscosity *B* Coefficients into Ionic Contributions. Part 2.—TetrabutylammoniumTetrabutylborate and Tetraphenylphosphonium Tetraphenylborate in HexamethylphosphoricTriamide, 2631
Tetrafluoroethylene
Electron Spin Resonance Spectra of Tetrafluoroethylene Radical Cation, 93
Structure of the Tetrafluoroethylene Radical Anion and Interpretations of its Electron Spin Resonance Spectra, 1565
Tetrahydrofuran
Complex Formation of Alkali Chlorides with Benzo-18-crown-6 Incorporated in Poly(Vinyl Alcohol) in Water + Dioxane and Water + Tetrahydrofuran Mixtures, 2153
***N,N,N′,N′*-Tetramethyl-*p*-phenylenediaminium**
Electron Spin Resonance Investigation of Cation-radical Salts of *N,N,N′,N′*-Tetramethyl-*p*-phenylenediaminium

N,N,N',N'-Tetramethyl (*cont.*)
(TMPD) Hexafluorophosphate, Hexafluorarsenate and Hexafluoro-antimonate, 2077
Tetraphenylborate
Separation of Viscosity *B* Coefficients into Ionic Contributions. Part 2.—TetrabutylammoniumTetrabutylborate and Tetraphenylphosphonium Tetraphenylborate in HexamethylphosphoricTriamide, 2631
Tetraphenylphosphonium
Separation of Viscosity *B* Coefficients into Ionic Contributions. Part 2.—TetrabutylammoniumTetrabutylborate and Tetraphenylphosphonium Tetraphenylborate in HexamethylphosphoricTriamide, 2631
Thallium
Use of Thallium(I) Probe for Identifying Sites of Mobile Cations in Glass during Electrolysis, 661
Thermal Analysis
Thermal Analysis of MnO_x–CuO Catalysts, 1633
Thermal Conductivity
Thermal Conductivity of Polyatomic Gases at Low Density, 163
Thermal Decomposition
Studies of the Thermal Decomposition of βNiO(OH) and Nickel Peroxide by X-ray Photoelectron Spectroscopy, 1769
The Molecular Component in the Thermal Decomposition of Azomethane, 1891
A Melt Mechanism for the Thermal Decomposition of Ammonium Dichromate, 2143
Kinetics of the Gas-phase Thermal Decomposition of 2,3-Dimethyl-2,3-epoxypentane, 2185
Thermal Desorption
Studies of the Surface of Titanium Dioxide. Part 5.—Thermal Desorption of Hydrogen, 137
Thermal-desorption Studies
Adsorption Interaction of Water with Microporous Adsorbents. Part 2.—Enthalpy of Immersion and Thermal-desorption Studies, 1157
Thermochemistry
Thermochemistry of Silicon-containing Compounds. Part 1.—Silicon–Halogen Compounds, an Evaluation, 2233
Thermodynamic Internal Pressure
Structure of Aqueous Electrolyte Solutions. Thermodynamic Internal Pressure, 1109
Thermodynamic Mixing Functions
Relationship between the Enthalpy of Transfer of a Solute and the Thermodynamic Mixing Functions of Mixed Solvents, 1061
Thermodynamic Properties
Thermodynamic Properties of Liquid Mixtures of Krypton + Methane, 1869
Thermodynamic Study
Thermodynamic Study of Liquid Mixtures of Ethane and Ethene, 2657
Thermodynamics of Solvation
Calculation of the Thermodynamics of Solvation of Gaseous Univalent Ions in Water from 273 to 573 K, 2781
Thiourea
Photoinduced Electron Transfer in the Paraquat–Thiourea Molecular Complex, 55
Thorium Dioxide
Infrared Study of Acid–Base Properties of Thorium Dioxide, 2219
Time-resolved Studies
Time-resolved Studies of Fluorescence Quenching in a Water-in-oil Microemulsion, 2161
Tin Oxide
Reactivity of Tin Oxide and Some Antimony–Tin Oxide Catalysts for the Oxidation of Methane and the Isotopic Exchange of Oxygen. An Examination of the Role of Adsorbed and Lattice Oxygen in Catalytic Oxidation, 1431
TiO_2
Infrared Studies of the Effect of Preadsorbed Pyridine on the Oxidation of Butan-2-ol Adsorbed on TiO_2, 2559
Mechanism of the Inhibiting Effect of Phosphate on the Anatase→Rutile Transformation Induced by Thermal and Mechanical Treatment of TiO_2, 2765
Titanium Dioxide
Studies of the Surface of Titanium Dioxide. Part 5.—Thermal Desorption of Hydrogen, 137
Investigation of Precipitated Alumina Structures by Secondary-ion Mass Spectrometry and Electron Paramagnetic Resonance Spectrometry. Part 3.—Structure of an Alumina Coating Precipitated on Rutile Titanium Dioxide, 185
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651
Photocatalytic Oxidation of Liquid Propan-2-ol by Titanium Dioxide, 1381
Photoinduced Oxygen Formation and Silver-metal Deposition in Aqueous Solutions of Various Silver Salts by Suspended Titanium Dioxide Powder, 2685
Toluene
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 1.—Alkylation of Toluene with Methanol: Consideration of the Effects of Reaction Parameters on Catalyst Deactivation and the Extent of Polysubstitution, 281
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 2.—Alkylation of Toluene with Methanol: Consideration of the Effects of Catalyst Deactivation on the Primary Product Distribution, 297
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and

Toluene (*cont.*)
Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Tracer Studies
Rhodium-catalysed Hydrogenation of Allene as Revealed by [^{14}C]Propylene and [^{14}C]Carbon Monoxide Tracer Studies, 2195
***trans*-Dichlorotetrapyridinecobalt(III) Ion**
Kinetics of the Solvolysis of the *trans*-Dichlorotetrapyridinecobalt(III) Ion in Water + t-ButylAlcohol Mixtures, 2367
***trans*Chlorazidobis(1,2-diaminoethane)cobalt(III)**
Kinetics of the Solvolysis of *trans*-Chloroazidobis(1,2-diaminoethane)cobalt(III) Ions in Water and in Water + Propan-2-ol Mixtures, 253
Transference
Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance and Transference Data. Application to Concentrated Solutions of Cadmium Iodide, 1317
Transition-metal Complexes
Nuclear Magnetic Resonance Studies of Transition-metal Complexes of Ethylenediaminetetra-acetic acid (EDTA) in Aqueous Solution, 543
Transition Metals
Metal Auger Intensity Ratios in Transition Metals and Their Compounds, 1229
Transport
Colloidal Catalysis. Transport *versus* Surface Control, 1649
Transport Numbers
Washburn Numbers. Part 5.—Relative Solvent Transport Numbers for Ion Constituents in the Dioxan + Water and Dimethylsulphoxide + Water Systems, 2289
Tri-n-alkylammoniumHalides
Volumetric and Dielectric Properties of Benzene Solutions of Some Tri-n-alkylammoniumHalides at 298.15 K, 2377
Triethylamine
Infrared Study of the Adsorption of Triethylamine at the Rutile/Vapour and Rutile/Heptane Interfaces, 2991
1,3,5-Trinitrobenzene
Equilibrium Constants for Electron-donor–Acceptor Complexes formed between Hexamethylbenzene and 1,3,5-Trinitrobenzene in Carbon Tetrachloride Solution determined by ^{13}C Nuclear Magnetic Resonance Chemical Shifts, 2729
Tris(1,10-phenanthroline) iron(II) Perchlorate
First and Second Association Constants of Unsymmetrical Metal-chelate Electrolytes from Conductance Measurements. Tris(1,10-phenanthroline) iron(II) Perchlorate in Nitrobenzene + Carbon Tetrachloride Mixtures at 25 °C, 625
Ultrasonic Methods
Dynamic Studies of the Interaction between Diols and Water by Ultrasonic Methods. Part 2.—Pentane-1,5-diol and Hexane-1,6-diol Solutions, 2651
Ultraviolet
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Platinum Titanium Dioxide Catalysts. A Photoconductivity Study of Electron Transfer from the Ultraviolet-illuminated Support to the Metal and of the Influence of Hydrogen, 651
Uni-univalent Electrolytes
Enthalpies of Solution of Some Uni-univalent Electrolytes in Hexamethylphosphotriamide at 298.15 K, 2211
Unimolecular Decomposition
Thermal Unimolecular Decomposition of β-Butyrolactone (4-Methyloxetan-2-one), 1659
Uracil
Effect of Copper(II) Ions on the γ-Radiolysis of Uracil, 2613
Uranium
X-ray Photoelectron Spectroscopy Study of Uranium and Antimony Mixed Metal-oxide Catalysts, 879
Urea
Enthalpies and Heat Capacities of Transfer of Some Sugars from Water to Aqueous Urea, 1303
Vanadium
Study of Mixed-oxide Catalysts Containing Bismuth, Vanadium and Antimony. Preparation, Phase Composition, Spectroscopic Characterization and Catalytic Oxidation of Propene, 2055
Vanadium–Titanium Oxide
Infrared Studies of Acid–Base Properties of Vanadium–Titanium Oxide and Oxidation of Alcohols on it, 2343
Vanadium–Titanium Oxides
Infrared and X-ray Diffraction Investigations of Vanadium–Titanium Oxides for the Oxidation of Alcohol, 2929
Vanadyls
Vanadyls from Oil Shale Rotational Motion Studied by Electron Spin Resonance Spectroscopy, 1733
Velocity Correlations
Velocity Correlations in Aqueous Electrolyte Solutions from Diffusion, Conductance and Transference Data. Application to Concentrated Solutions of Cadmium Iodide, 1317
Vermiculite
Reactivity and Structure of Nickel-exchanged Prayssac Vermiculite, 599
Vinylic Radical
Formation and Dimerization of Vinylic Radical Anions and Ion Pairs. A Pulse Radiolysis Study, 589

Viologens
Triplet-mediated Photoreduction of Viologens by Aromatic Hydrocarbons. A Laser Flash-photolysis Study, 1135
Virial Equation
Simulation Experiments. The Virial Equation in the Adsorption of Isobutene on Aerosil, 1833
Viscometric Behaviour
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Viscosity
Relations between Intradiffusion and Viscosity Coefficients. Tests of the Albright Equation, 1327
Viscosity *B* Coefficients
Separation of Viscosity *B* Coefficients into Ionic Contributions. Part 2.—TetrabutylammoniumTetrabutylborate and Tetraphenylphosphonium Tetraphenylborate in HexamethylphosphoricTriamide, 2631
Viscous Effects
Viscous Effects in the Frictional Formalism of Non-equilibrium Thermodynamics, 2355
Visible
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Vitamin B_{12}
Electron Addition to Alkyl Cobalamins, Coenzyme B_{12} and Vitamin B_{12}. A Radiolytic and Electron Spin Resonance Study, 269
Voltammetric Behaviour
Voltammetric Behaviour of Ammonia at Gold and Vitreous Carbon Rotating-disc Electrodes in Molten Alkali Nitrates, 711
Volume Changes
Enthalpy and Volume Changes on Mixing Oligo(oxyethylene)s and n-Alkanes, 2695
V_2O_5–MoO_3 Catalysts
Structural Relationships in the Low-temperature Evolution of V_2O_5–MoO_3 Catalysts, 27
Wall Effects
Wall Effects in du Noüy Ring Tensiometry Theory and Experiment, 1701
Washburn Numbers
Washburn Numbers. Part 5.—Relative Solvent Transport Numbers for Ion Constituents in the Dioxan + Water and Dimethylsulphoxide + Water Systems, 2289
Water
Ion–Solvent Interactions in Water-rich Binary Mixtures. Part 2.—Viscometric Behaviour of NaCl, NaBr, KCl, KBr and Bu_4NBr in Water + Hexamethylphosphoric Triamide Mixtures at 25 and 35 °C, 431
Optical Microscopy and Nuclear Magnetic Resonance Studies of Mesophases Formed at Compositions between Hexagonal and Lamellar Phases in Sodium n-Alkanoate + Water Mixtures and Related Surfactant Systems, 637
Heats of Mixing of Poly(styrenesulphonic acid) and its Tetramethylammonium Salt with Alkali-metal Poly(styrenesulphonates) in Dioxan + Water Mixtures, 699
Activation of Electronic Conduction in Molecular Solids by Adsorbed Water, 705
Phase Behaviour of Polyoxyethylene Surfactants with Water. Mesophase Structures and Partial Miscibility (Cloud Points), 975
Free Energies of Transfer of Ions from Water to Butan-1-ol, 1001
Adsorption Interaction of Water with Microporous Adsorbents. Part 1.—Water-vapour Adsorption on Activated Carbon Cloth, 1147
Adsorption Interaction of Water with Microporous Adsorbents. Part 2.—Enthalpy of Immersion and Thermal-desorption Studies, 1157
Adsorption Interaction of Water with Microporous Adsorbents. Part 3.—Dependence of Adsorption–Desorption Hystereses on Extent of Activation, 1165
Enthalpies and Heat Capacities of Transfer of Some Sugars from Water to Aqueous Urea, 1303
Dynamic Studies of the Interaction between Diols and Water by Ultrasonic Methods. Part 2.—Pentane-1,5-diol and Hexane-1,6-diol Solutions, 2651
Free Energies of Transfer of 1:1 Electrolytes from Water to Nitrobenzene. Partition of Ions in the Water + Nitrobenzene System, 2713
X-ray
Extended X-ray Absorption Fine Structure Investigation of Local Symmetry Changes in Co^{2+} and Ni^{2+}-exchanged Zirconium Phosphates, 1039
X-ray Auger Electron Spectroscopy
X-ray Photoelectron Spectroscopy, X-ray Auger Electron Spectroscopy and Electron Spin Resonance Studies of the Reduction of Some Solid Metal 12-Molybdophosphates, 2467
X-ray Diffraction
Particle Orientation Distributions and Stacking Arrangements in Size-fractionated Montmorillonite Measured by Neutron and X-ray Diffraction, 1687
X-ray Diffraction Investigations
Infrared and X-ray Diffraction Investigations of Vanadium–Titanium Oxides for the Oxidation of Alcohol, 2929
X-ray Photoelectron Spectroscopy
X-ray Photoelectron Spectroscopy Study of Uranium and Antimony Mixed Metal-oxide Catalysts, 879
Studies of the Thermal Decomposition of *β*NiO(OH) and Nickel Peroxide by X-ray Photoelectron Spectroscopy, 1769
X-ray Photoelectron Spectroscopy, X-ray Auger Electron Spectroscopy and Electron Spin Resonance Studies of the Reduction of Some Solid Metal 12-Molybdophosphates, 2467

Yeast
Adsorption of Colloidal Hydrous Alumina on Yeast Cells, 561
Zeolite
Characterization of Zeolite Acidity by n-Butylamine Titration. A Comparative Study using Hammett Indicators and Calorimetry, 147
Characterization of Zeolite Acidity. A Gas-chromatographic Study using n-Butylamine and Ammonia, 2569
Zeolite Catalysts
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 1.—Alkylation of Toluene with Methanol: Consideration of the Effects of Reaction Parameters on Catalyst Deactivation and the Extent of Polysubstitution, 281
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 2.—Alkylation of Toluene with Methanol: Consideration of the Effects of Catalyst Deactivation on the Primary Product Distribution, 297
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 3.—Alkylation of Toluene and Benzene with Ethanol: Consideration of the Effects of Initial Coke Formation on *para* Selectivity, 311
Alkylation Reactions over Ion-exchanged Molecular Sieve Zeolite Catalysts. Part 4.—Competitive Alkylation of Toluene and Benzene with Ethanol, n-Propyl Alcohol, Isopropyl Alcohol and t-Butyl Alcohol: Consideration of the Reactivity and Selectivity of the Alkylating Species, 327
Zeolites
Transmission Ultraviolet–Visible–Near-infrared Spectroscopic Investigations of the Formation of Carbocations in Zeolites. Re-examination of Propene/CoNaY and Extension to *trans*-Butene/CoNaY, Propene/H-Mordenite and Cyclopropane/H-Mordenite, 373
Reactions of Dimethylbutenes on Nickel-exchanged and Zinc-exchanged 13X-type Zeolites, 453
Dielectric and Far-infrared Investigation of Cation Movements in X-type Zeolites. Study of their Correlations, 779
Sorption Kinetics of Neopentane on NaX Zeolites of Different Crystal Sizes, 1099
Chromium Ions within Zeolites. Part 1.—Infrared, Electron Spin Resonance and Temperature-programmed Reduction Studies of the Valence States of Chromium Ions, 1573
Chromium Ions within Zeolites. Part 2.—A Quantum-chemical Study of the Properties of Chromium Ions in Faujasites, 1585
Chromium Ions within Zeolites. Part 3.—The Influence of the Valence State of Chromium on the Catalytic Activity of Cr Zeolites in Ethylene Polymerization, 1591
Sorption Studies on Dealuminated and Decationated Zeolites, 1679
Interaction between Zeolites and Cluster Compounds. Part 1.—Adsorption of Iron Pentacarbonyl on Zeolites, 1819
Determination of the Intracrystalline Diffusion Coefficient of Methane in A Zeolites by Means of Neutron Spin-echo Experiments, 1911
Far-infrared Spectra of the Ammonia and Hydrogen Forms of Zeolites of Types X and Y, 2773
Zinc Oxide
Heat of Adsorption of Carbon Monoxide on Zinc Oxide Pretreated by Various Methods, 1995
Reactions of 2-Methylpropene and other Alkenes on Zinc Oxide, 2899

Author index

Abraham, M. H., 2781
Adam, U. S., 2745
Adams, F., 1451
Agudo, A. L., 2543
Aharoni, C., 119
Ahluwalia, J. C., 1303
Akimoto, M., 2467
Al-Kafaji, J. K. H., 2695
Alagna, L., 1039
Albery, W. J., 2583
Albright, J. G., 1327
Anastasi, C., 741, 749, 505
Andersson, Y., 1605
Antonucci, P., 2605
Ardizzone, S., 2449
Areán, C. O., 1191
Ateş, S., 2853
Attwood, D., 2669
Au, C.-T., 1779
Augustine, R. L., 2639
Awan, I. A., 1413
Awwad, A. M., 2333
Ayranci, E., 1357
Azim, S. A., 2133
Azzouz, A. S. P., 675
Baggott, J. E., 221
Barber, M., 1249
Barreiros, S. F., 1869
Barton, S. S., 1147, 1157, 1165, 1173
Baucke, F. G. K., 661
Bauich, D. L., 689
Baussart, H., 879, 2055
Beaudoin, J. J., 2071
Beck, W. H., 953, 965
Bein, T., 1819
Bell, R. P., 2229
Bennetto, H. P., 245
Beran, S., 1585
Berndt, G. F., 195
Bertigny, J-P., 209
Bettelheim, A., 1555
Bhattacharya, M., 1513
Bhattacharyya, S. N., 2613
Bin-Daar, G., 1199
Blandamer, M. J., 1289
Boccuzzi, F., 1843
Boehm, H. P., 1793
Booth, B. O., 173
Booth, C., 2695
Bordoli, R. S., 1249
Borello, E., 607
Borówko M., 363
Bostock, T., 975
Boucher, E. A., 1951, 2529
Bowen, P., 1793
Bowerman, B. S., 1605
Bridge, N. J., 2133, 2161
Brouillat, R., 209
Brown, I., 1431
Brown, R., 2899
Bruce, J. M., 391, 405
Bülow, M., 1099, 2457
Burriesci, N., 2449
Bury, R., 2517
Buxton, G. V., 2961
Bye, G. C., 2311
Calado, J. C. G., 1869, 2657
Callaghan, I. C., 2723
Calvo, E. J., 2583
Candy, J-P., 835, 823
Cardon, F., 1391, 2813
Carlier, M., 815
Carroll, W. M., 281, 297, 311, 327
Carrott, P. J. M., 2425
Carru, J-C., 779
Carson, D., 1921
Cassford, G. E., 1617
Castagnolo, M., 431, 2211
Chandra, H., 2705
Chandwadkar, A. J., 1679
Chattopadhyay, A. K., 2915
Chudek, J. A., 2729
Clancy, P., 2657
Clifford, A. A., 733
Cohen De Lara, E., 2271, 1911
Coluccia, S., 1881, 607
Contreras, E., 1001
Conway, B. E., 1357
Cooney, R. P., 2887
Cornell, R. M., 2679
Cortes, J., 1833
Coudurier, G., 1921
Coughlan, B., 281, 297, 311, 327
Craven, R. J. B., 689
Criado, J., 2765
Curthoys, G., 147, 805, 2569
Daghetti, A., 2801
D'Alba F., 39
Danil De Namor, A. F., 2713
Dare-Edwards, M. P., 1199, 2027, 2111
Das, P. K., 1135
Davidson, I. M. T., 2705
Davis, A., 235
de Bièvre, P., 2821, 2835
De Giglio, A., 431, 2631
De Largy, B., 383
De Namor, A. F. Danil, 1001
De Vijlder, M., 155
Dei, L., 1599
Delafosse, D., 599
Dell'Atti A., 431
Delobel, R., 2055, 879
Desimoni, E., 711
Di Lorenzo, S., 39
Dickinson, E., 2937
Din, M., 689
Disdier, J., 651
Dombrowski, D., 2773
Donato, A., 2605
Dondur, V., 1633
Douglas, M. A., 1533
Druet, E., 2219
Drysdale, D. D., 689
Dubois, J-E., 209
Duffy, J. A., 661
Ebeid, E-Z. M., 1183, 2133
Echigoya, E., 2467
Edge, A. V. J., 1317, 1327
Egdell, R. G., 893
Eid, A. E., 253
Eley, D. D., 755, 669
Elgy, C. N., 2367, 2439
Elliott, G. J., 1249
Emsley, A. M., 1, 15
Enokida, A., 1639
Eriksen, T. E., 1493, 1503
Euranto, E. K., 1483
Evans, B. S.,, 1471
Evans, G. F., 245
Everett, D. H., 2723, 2953
Fairhurst, S. A., 439
Fairhust, S. A., 925
Feakins, D., 1061, 2289
Feldman, R. F., 2071
Ferragina, C., 1039
Fierro, J. L. G., 2543
Finch, A., 383
Finster, J., 2013
Flanagan, T. B., 1605
Fletcher, A. J. P., 2723
Fletcher, P. D. I., 2161
Fletcher, P. D. T., 1959
Fletcher, S., 467
Flockhart, B. D., 1009
Flowers, M. C., 1413, 2185, 2179
Forissier, M., 1921
Formaro, L., 2449
Fornili, S. L., 1085

Förster, H., 373
Fortes, M. A., 81
Foster, R., 2729
Fouilloux, P., 823
Fox, M. F., 1987
Franke, S., 373
Franks, F., 2249
Fraser, M. E., 527
Freeman, P. A., 1701
Freund, E., 2219, 2299
Freund, P. L., 1649, 481, 491
Frey, H. M., 1237, 1659
Fruwert, J., 2773
Fubini, B., 1995, 1215
Fujita, H., 2077
Furlong, D. N., 1701
Furukawa, K., 2997
Gal, I. J., 2171
Galvagno, S., 2605
Galwey, A. K., 2143
Ganguli, S., 1513
Garbowski, E., 835
Gardner, P. J., 383
Garnett, C. J., 953, 965
Garrett, B. B., 1733
Garrone, E., 607
Gengembre, L., 879, 2055
Getoff, N., 2389
Ghiotti, G., 1843
Ghosh, A. K., 147, 805, 2569
Giamello, E., 1995
Gilbert, R. G., 1257
Gomes de Azevedo, E. J. S., 2657
Gomes, W. P., 1391, 2813
Goodall, D. M., 2475, 2489, 2501
Goodenough, J. B., 893, 1199, 2027
Graham, D., 1281
Graham, J., 2991
Grant, S., 689
Grech, E., 2005
Grimblot, J., 879, 2055
Grzybkowski, W., 2319
Guarini, G. G. T., 1599
Gubbins, K. E., 2657
Gulick, W. M. Jr, 1733
Habib, A-F. M., 2133
Hall, P. G., 343
Hall, P. L., 1687
Hamnett, A., 893, 1199, 2027, 2111
Hanafi, S., 2013
Hann, R. A., 343
Hare, A. S., 185
Harriman, A., 765, 2875, 1335
Harrison, R., 1687
Harvey, P. R., 1381, 2975
Hasegawa, A., 1931, 93, 1565, 941
Hashitani, T., 1765
Hatada, M., 1973
Hattori H., 1373
Hauge, R. H., 1533
Hayashi, M., 941
Hayes, M. H. B., 1687
Hedge, M. S., 1229
Hentschel, D., 2013
Hermansson, B., 1351
Herrington, T. M., 845
Herrmann, J-M., 651
Hertz, H. G., 1317
Hey, M. J., 755
Hill, M. P., 1, 15
Hill, T., 2713
Honeyman, M. R., 2185, 2179
House, W. A., 1617
Howard, J., 1281
Hronec, M.,, 1091
Hyde, E. A., 2405
Iida, Y., 1757
Iijima, T., 2153
Ikeda, S., 2843
Imae, T., 2843
Imamura, H., 1461
Inglese, A., 2211
Issa, R. M., 2133
Ito, T., 913, 2277
Itoh, H., 1373
Itoh, K., 2843
Iwaki, T., 137
Iwamoto, E., 625
Izzo, V., 1085
Jacobs, P. A., 1819
Jandík, P., 721
Jaroniec, M., 363
Jarrett, F. M., 2729
Jasra, R. V., 1303
Jíru, P., 1585
Johns, A. I., 733
Jones, T. G. J., 2529
Jones, W., 1793
Joyner, R. W., 1779
Kagiya, T., 2685
Kahn, R., 1911
Kajiwara, H., 2685
Kalenik, J., 2005
Kallay, N., 65
Kanellopoulos, N. K., 517
Kanerva, L. T., 1483
Kayem, G. J., 561
Kell, N., 383
Kelley, C. K., 55
Kelly, K. P., 2639
Kemball, C., 453, 2899
Kermarec, M., 599
Khosravi-Babadi, E., 1951
Kim, J. M., 2153
King, G. A. M., 75
Kiss, G., 1091
Kita, H., 1027
Klein, J., 99
Klepping, A. H., 669
Klofutar, C., 2377
Koczorowski, Z., 2801
Komiyama, J., 2153
Koresh, J. E., 1147, 1157, 1165, 1173
Kotera, Y., 127
Kremer, M. L., 2125
Krumgalz, B. S., 571
Kubokawa, Y., 2343, 2559, 2929
Kuhn, A. T., 1741, 417
Kuhnen, N. C., 2195
Kulkarni, S. B., 1679
Kuna, S., 1987
Kydd, R. A., 2887
La Ginestra, A., 1039
Laarif, A., 1921
Lambie, A. J., 953, 965
Lamotte, J., 2219
Lampa, S., 1633
Land, E. J., 391, 405
Langan, J. R., 589
Laschi, F., 2955
Lavalley, J-C., 2219
Laverty, D. T., 869
Lawrence, K. G., 2631, 615
Le Bras, M., 2055
Leach, H. F., 453
Leroy, J-M., 879, 2055
Leyendekkers, J. V., 1109, 1123
Liler, M., 953, 965
Lind, J., 1493, 1503
Liszi, J., 2781
Long, M. M., 853
Lorenz, P., 1099, 2457
Luys, M-J., 1451
McEvoy, M., 2311
Maitland, G. C., 163
Maj, P., 1931
Majer, J. R., 675
Malarski, Z., 2005
Malati, M. A., 2311
Malcome-Lawes, D. J., 2735
Mandal, P. C., 2613
Mann, S., 2679
Marcilly, C., 2299
Margrave, J. L., 1533
Marshall, R. M., 1891
Matijević, E., 65
Matteoli, E., 2781
Mayaffre, A., 2517
McDonald, M. P., 975
Meites, L., 721
Merényi G., 1493, 1503
Metcalfe, I. M., 1701
Metcalfe, J., 1721
Mezei, F., 1911
Mietk, W., 1099, 2457
Mikhail, R. S., 2013
Mills, R., 1317, 1327
Millward, G. R., 1793
Mingozzi, S., 2801
Miranda, R. M., 81

Mitchell, D. J., 975
Miyake, M., 2997
Miyata, H., 2559, 2929, 2343
Moller, B. W., 453
Monica, M. Della, 2211, 2631
Monya, S., 625
Moore, P. B., 669
Morikawa, H., 2997
Moroney, L. M., 1769
Morris, E. R., 2475, 2489, 2501
Morrison, J. A., 2863
Morsi, S. E., 1183
Mukherjee, T., 391, 405
Murakami, T., 913
Mustafa, M., 163
Nagai, S., 1973
Naish, C. C., 893
Najbar, M., 27
Nakagawa, Y., 2343, 2929
Nakajima, H., 1027
Nakajima, T., 2559
Napper, D. H., 1257
Neagle, W., 263
Nelligan, J. D., 65
Neumann-Spallart, M., 1017
Niccolai, N., 2955
Nishikawa, S., 2651
Nishimoto, S., 2685
North, A. M., 2333
Norton, I. T., 2475, 2489, 2501
Nováková, J., 1573
Nunan, J., 281, 297, 311, 327
Nunes Da Ponte, M., 1869
Nunn, C. C., 2953
Oakes, J., 543
Ohno, H., 2997
Ohtani, B., 2685
Okubo, T., 1639
O'Neill, R. D., 2289
Ono, T., 2343, 2929
Osborne, A. D., 765
Ovenston, A., 1073
Ozaki, Y., 2863
Özeki, M., 2153
Ozer, D., 1555
Paligorić, I., 2171
Paljk, Š., 2377
Parash, R., 1555
Parker, I. B., 1421
Parkin, B. A., 845
Parsley, M., 343
Patel, M., 599
Patterson, W. R., 1421, 1431
Pawlak, Z., 1523, 1987
Pedley, M. D., 2249
Peeters, G., 2821, 2835
Penboss, I. A., 1257
Penny, D. E., 2103
Peters, C., 2863
Pethrick, R. A., 2333
Pethybridge, A. D., 845, 1617
Petrella, G., 2211
Petrera, M., 2449
Petropoulos, J. H., 517
Pezerat, H., 599
Pichat, P., 651
Pidgeon, I. M., 1237
Pietropaolo, R., 2605
Pilarczyk, M., 2319
Pilkington, R. S., 439, 925
Pilling, M. J., 221, 235
Pink, R. C., 1009
Piper, J., 2863
Pogliani, L., 2955
Pöppl, L., 2143
Porter, G., 1335
Porter, S. K., 2043
Poulous, A. T., 55
Prasad, K. U., 853
Pratt, G. L., 2597
Primet, M., 835
Prosperi, T., 1039
Puschmann, H., 1833
Raatz, F., 2299
Rabette, P., 599
Rajam, S., 2143
Ralph, E., 1289
Ramsay, J. D. F., 173
Randle, T. H., 417, 1741
Rao, C. N. R., 1229
Rao, D. N. R., 269
Ratajczak,, H., 2773
Real, C., 2765
Rees, D. A., 2475, 2489, 2501
Rendall, K., 1901, 637
Rhodes, T., 2961
Richardson, D. J., 689
Riebeschl, W., 1311
Rigole, W., 2813
Ritter, A., 2389
Ritter, T. J., 2103
Rizkalla, E. N., 1857
Robb, I. D., 2745
Roberts, M. W., 1769, 1779
Robertson, R. E., 1289
Robinson, B. H., 1959
Robson, E. W., 2937
Rochester, C. H., 263, 2405, 2543, 2991
Rockliffe, J. W., 1901
Roduner, E., 1939
Roffey, M. G., 845
Rooney, J. J., 869
Ross, D. K., 1687
Rosseinsky, D. R., 343
Rossi, C., 2955
Rouxhet, P. G., 561
Roy, G. L. de, 1451
Rudham, R., 1381, 2405, 2975, 2991
Rundqvist, S., 1605
Sabbatini, L., 711
Sacco, A., 615, 2211, 431, 2631
Salmon, G. A., 589
Samulevič, N. N., 1099
Schlögl, R., 1793
Schmidt, P. P., 797
Schöllner, R., 2013
Schuhl, Y., 2055
Schwörer, F., 2389
Scott, A. C., 733
Scott, J. M. W., 1289
Sedgwick, R. D., 1249
Seebode, J., 373
Sellers, R. M., 2961
Seloudoux, R., 2271
Sen, P., 1229
Sesay, I. M., 1009
Sgroi, G., 1085
Shahkar, G., 1891
Sheppard, N., 2425
Sheppard, R. J., 245
Shima, K., 2467
Shimizu, Y., 1973
Sigstad, E., 1001, 2713
Singh-Boparai, S., 1779
Sircar, S., 785, 2085
Sitek, J., 1091
Sivieri, E., 2449
Skarnulis, A. J., 2679
Škerjanc, J., 699
Smart, R. St C., 1769
Smith, E. G., 543, 1901
Sobczyk, L., 2005
Sochet, L-R., 815
Speight, J. M., 755
Spiro, M., 481, 491, 1649
Stadnicka, K., 27
Stainsby, G., 2937
Staiti, P., 2605
Stedman, D. H., 527
Stephenson, J. M., 2983
Stilbs, P., 1351
Stock, T., 2773
Stone, F. S., 1191, 1215
Streett, W. B., 1869
Struve, P., 1099, 2457
Sutcliffe, L. H., 439, 925
Suzuki, H., 127
Suzuki, T., 2997
Swallow, A. J., 391, 405
Symons, M. C. R., 269, 941, 1565, 1931, 2705, 1273, 2983
Szécsényi-Mészáros, K., 2171
Tabourier, P., 779
Takamizawa, K., 1757
Tanabe, K., 1373
Tanaka, K., 1765
Taniewska-Osińska, S., 2879
Tatič, M., 699
Taylor, D., 2899
Tejuca, L. G., 2543
Tench, A. J., 1881
Tennakone, K., 705
Theobald, F., 1921
Thijs, A., 2821, 2835

Thomson, S. J., 195, 2195
Tiddy, G. J. T., 637, 975, 1901
Tokuda, T., 913, 2277
Tomlinson, A. A. G., 1039
Tomlinson, E., 1311
Trapane, T. L., 853
Trasatti, S., 2801
Treiner, C., 2517, 2915
Trenwith, A. B., 2755
Trevellick, P. R., 2027, 2111
Trevethan, M. A., 637
Tsuchiya, S., 1461
Tuck, J. J., 1687
Tusk, M., 1987
Tvarožková, Z., 1573
Tvarůžková, Z., 1591
Tyler, A. N., 1249
Ueno, A., 127
Ungarish, M., 119
Urry, D. W., 853
Valencia, E., 1833
Valera, E. de, 1061
Vanmaekelbergh, D., 1391, 2813
Vansant, E. F., 1451, 2821, 2835
Vedrine, J. C., 1921
Verhaert, I., 2821, 2835
Vesnaver, G., 699
Vickerman, J. C., 185
Vink, H., 1403, 2355, 2359
Viñuela, J. S. Díez,, 1191
Vučelić, D., 1633
Wacrenier, J-M., 779
Waddington, D. J., 505
Waddington, T. C., 1281
Waernes, O., 711
Waghorne, W. E., 1061, 2289
Wakabayashi, T., 941
Wakeham, W. A., 163
Walker, A., 689
Walls, J. R., 1073
Walsh, R., 2233
Walters, P., 1335
Wang, G-W., 1373
Ward, S., 1381, 2975
Waring, L., 975
Warner, R. W., 2639
Watling, G., 689
Watson, J. T. R., 733
Watts, H. P., 1659
Waugh, K. C., 343
Wawrzynów, A., 1523
Webb, G., 195, 2195
Webster, B. C., 1939
Weeks, I., 1471
Wells, C. F., 253, 2367, 2439
Wendt, G., 2013
White, L. R., 1701
Whittle, E., 1471
Wichterlová, B., 1585, 1591, 1573
Wood, S. W., 2597
Woolley, A., 505
Woźnicka, J., 2879
Yamamoto, Y., 625
Yashonath, S., 1229
Yildiz, A., 2853
Yoshioka, M., 2277
Zagòrska, I., 2801
Zambonin, P. G., 711
Ziadeh, Y., 2735
Zsigrai, I. J., 2171
Zuman, P., 721